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A STUDY OF THE

KINDERGARTEN

PROBLEM

**IN THE PUBLIC KINDERGARTENS OF SANTA
BARBARA, CALIFORNIA, FOR THE YEAR 1898-9**

—BY—

FREDERIC BURK, Ph. D.,
City Superintendent of Schools
and
CAROLINE FREAR BURK, A. M.

In Cooperation with

ORPHA M. QUAYLE, **JULIET POWELL RICE,**
Supervisor of Kindergartens Supervisor of Music
MARTHA D. TALLANT

KINDERGARTNERS :

GAIL HARRISON **GERTRUDE M. DIEHL,**
ALICE L. BLACKFORD **FANNIE REED**
MAY W. REESE **EVALINE ROSE SEXTON**
 ANNETTE UNDERWOOD

SAN FRANCISCO:
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TABLE OF CONTENTS.

	PAGES.
I. PREFACE—Frederic Burk.....	5- 8
II. HISTORY OF KINDERGARTEN ASSOCIATION—With roster of officers and members—M. D. Tallant.....	9- 15
III. OUTLINE OF PAST YEAR'S WORK—Orpha M. Quayle,	16- 23
IV. NEUROLOGICAL CONDITIONS OF THE KINDERGARTEN CHILD—Frederic Burk.....	24- 30
V. PHYSICAL CULTURE—Introduction, and references to literature—Frederic Burk.....	31- 36
Practical applications—Orpha M. Quayle.....	36- 40
VI. PLAY—A Study of Kindergarten Children—Caroline Frear Burk.....	40- 53
VII. LANGUAGE—Introduction, and references—Frederic Burk	54- 59
Practical Methods in Story Telling, Illustrative Drawings, etc.—Gail Harrison, Gertrude M. Diehl and May W. Reese.....	59- 71
Clay Modeling—Gail Harrison.....	71- 73
VIII. MUSIC—Introduction, with references—Frederic Burk,	74- 75
Method of Instruction—Juliet Powell Rice.....	75- 80
IX. CHILDREN'S SPONTANEOUS CHOICE AND USE OF KIN- DERGARTEN MATERIALS—Caroline Frear Burk.....	81- 95
X. THE LOVE OF NATURE—Alice Blackford, Annette Underwood, Fannie Reed and Evaline Rose Sexton	96-102
XI. COUNTING AND NUMBER—Evaline Rose Sexton.....	103-107
XII. MORAL TRAINING, with references—Frederic Burk....	108-111
XIII. KINDERGARTEN DIARIES—Gertrude M. Diehl, Alice Blackford, May W. Reese.....	112-123

PREFACE.

This study is a report upon one year's work in a kindergarten system in which we have felt free to break somewhat from tradition. It is in no sense offered as a finished product, nor are its suggestions anything more than tentative. It is confessedly crude. The conditions have been favorable, but by no means ideal. We have sought to apply to the kindergarten, in a practical way, some of the products of common sense experience and some of the suggestions of child psychology. In a few subjects a limited bibliography has been inserted, but the field is here so wide that it would be impossible to attempt completion. Readers who are interested are earnestly advised to consult, in the matter of child-study literature, the Bibliography of Child-Study, by Mr. Louis N. Wilson, Librarian of Clark University, 1898. (Address Louis N. Wilson, Clark University Library, Worcester, Mass.) The child-study book references in Will S. Monroe's Bibliography of Education (International Education Series) will be found also valuable. More direct, but less accessible, are the topical reference syllabi issued by Professor Monroe for his classes in the State Normal School at Westfield, Mass.

The Santa Barbara kindergartens are a part of the public school system supported by a district tax. They now fully accommodate all children who are sent to them, one kindergarten being in connection with each grammar school building of the city. This public school kindergarten system is an outgrowth of a benevolent effort inaugurated by a number of active and public-spirited women of the city in 1887. For nine years the kindergartens were fostered and maintained by private contributions, but in 1896 the school department proposed a special tax for their support, and they have since been

maintained by this means. The success of the movement is unquestioned. In many other communities, similar in conditions to Santa Barbara, the kindergarten is struggling for public recognition and support, and the history of a successful establishment in our community may be of assistance to sister attempts.

A second purpose in this publication lies in the pedagogical phase of the kindergarten problem. The kindergarten is having great difficulty in commending itself with sufficient force to the public mind to secure its incorporation into the public school system. We all believe in the necessity for public education of children from four to six years, nevertheless we find it a difficult undertaking to assure the public mind that the kindergarten is not a frivolous nursery room based upon a cheery sentimentalism and framed in notions which no one can understand. On the other hand, the school people, while they openly pat the kindergarten upon the back patronizingly, as they would a fretful child, are not active in supplying real help to the cause. The kindergarten has not yet been able to make the school look upon it seriously. First grade teachers confide to their superintendents that they would prefer children who have not attended the kindergarten to those who have. They fail to find any product in the kindergarten training of which the school can make use, and, on the other hand, they whisper that the kindergarten children are unruly, lack a spirit of obedience, are dependent, and continually expect to be amused. It may be, of course, that the primary school teacher does not know a good thing when she sees it, but the upshot of the matter is that the kindergarten is having a hard time of it in establishing its place in the educational system. The least we can say is that the school and the kindergarten are out of joint. The kindergartens have in latter years been establishing connecting classes. But this seems an absurd makeshift, for there can, in reality, be no chasmic break in the child's life. There is a steady process of development. If the instincts of the kindergarten age are cultivated properly the work must show evident results for the school. That stands to reason. Of course we must dismiss at the outset any notion that the kindergarten should do the work of the

schools. No one wants that. The first grade teacher does not ask for children who can write and read, but she has a right to demand, as results of kindergarten work, the development of the instincts which are nascent during the kindergarten period. My personal conviction, after considerable practical study of children who come from the kindergarten, is that the fundamental weakness of the prevailing kindergarten consists in its gross neglect of instincts which properly belong to its period, and attempts prematurely to develop instincts which do not bud until the adolescent period. As a consequence there are few results of value to the school, for much of that which has been done should have been left undone, and much of that which has been left undone should have been done.

I believe that it is in the power of the modern child-study movement to remedy this disjointed condition. The investigations in child psychology, up to the present time, bear upon the period of infancy and that covered by the kindergarten more directly, perhaps, than upon any other period of development of the individual. Some of the sister sciences—biology, neurology, physiology, embryology, and anthropology—have also made important suggestions in the matter of education during this period. While it would unquestionably be a course of foolhardiness to apply the hints and raw suggestions of these modern sciences directly to practical education upon any large scale, on the other hand, a number of these same materials and methods of instruction have also been put forth from the fields of practical experience. While it is true that that wing of the kindergarten system, which has sought to gain information regarding children solely by a close letter study of Froebellian philosophy, has been slow to inform itself in the products of the modern sciences or to assist in the simpler lines of research, nevertheless, there are scattered here and there in the kindergarten a hopeful and growing number of students, who, admitting that kindergarten work should yield results which need no esoteric training to recognize, have not hesitated to go beyond the magic kindergarten circle in search of them. In many instances these results of experience in training children from four to six years fall

into line with what child-study investigations have foretold. I believe that there is already enough of these tried methods and materials from which to form the substantial basis of a curriculum for children from four to six years. Nothing need be included which is not now in successful practice in some kindergarten, here or there, and, while I am aware that some of these practices may seem treasonable to sacred traditions, I am not aware that they are beyond the pale of the broad intuitions of Father Froebel, and I share the general educational conviction that as the framer of the main pillars of an educational system no one has been greater than he. As a practical carpenter and a fresco painter, it may be, however, there is room for question upon his absolute infallibility, for, after all is said, it must be admitted that he was really mortal, that he lived at a specific period in educational history, that he was affected by his own environment of philosophy and science, and that this environment, this philosophy, and the horizon of science have since his time radically changed. During the half century or more since Froebel lived, an avalanche of new facts regarding man, his origin and process of development, has been precipitated upon education, materially changing our conceptions of the child and education, and practically wiping out the phraseology of that cheery pantheistic philosophy by which he expressed himself. Old principles must be restated from newer standpoints, and from more exact data of science and experience, and in a newer philosophic setting. If this were done, perhaps the orthodox and the unorthodox would not find it so difficult to shake hands. Nor can it be regarded as presumptuous or treasonable on the part of the latter end of the nineteenth century, after fifty years of research, to say that it knows more and more accurately the facts of these instincts than Froebel knew; nor even to say that Froebel erred in placing the development of some of the moral, æsthetic, and mathematical instincts too early in child life. Further, it is not an improbable possibility that later experience should show that, in the invention of or selection of methods and material to develop a principle, Froebel did not always choose the very best.

FREDERIC BURK.

History of the Santa Barbara Kindergarten Association.

Just twelve years ago some of our earnest women got their heads together and decided that a Kindergarten would be a good thing for Santa Barbara. A meeting was held, on February 4, 1887, and with just six charter members—Mrs. Corinne Wilson, Mrs. Nellie Backus, Mrs. Edwards, Mrs. W. H. Woodbridge and Mrs. M. D. Tallant—the Santa Barbara Kindergarten Association was formed. Four of these women are still members. Of course, the first questions were of ways and means, and it seemed best to solicit subscribers, and also to charge twenty-five cents per month for tuition, envelopes to be sent out at the discretion of the teachers. With a firm belief in the work and faith in the generosity of the public, the Association opened the Kindergarten the following month, though only twelve dollars had been subscribed. During this month donations amounting to \$21.60 in money, a piano rent free for six months, were secured, also materials for curtains, books, pictures and various articles for use and ornament. A membership fee of \$3 a year was agreed upon. The following annual report for the first year's work showed a very satisfactory condition of the finances:

Annual report of year ending February, 1888: Membership fees, \$51.00; tuition, \$66.75; sale of flowers, \$143.77; concert by young people, \$278.00; donations, \$136.55; monthly subscriptions, \$374.50. Total amount, \$1050.67. Amount expended for salaries, rent and material, \$771.84. Balance in treasury, \$278.83.

The Kindergarten was first held in the old Carillo building, on De la Guerra street, and opened with only seven children. The teachers, Miss Warner, director, and Miss Mary Scollan,

assistant, had literally to go out into the highways and compel the children to come in, but by the end of the month there were 35 names enrolled, and at the end of the year 77 names were on the books. It was soon found necessary to move to a warmer room, and the second year found the little band in the old church, on Ortega and De la Vina streets, but as children were not very plentiful in that neighborhood, it seemed best to move to the Odd Fellows' building, on State street, where, in September, 1890, the Kindergarten opened with 22 children, which number was increased to 98 by the end of the school year. The teachers consisted of a director, Miss Henrietta Casebolt, a paid teacher, Miss Mary Scollan, and two volunteer assistants. The Kindergarten has always been open to visitors, and this year 27 availed themselves of the opportunity. As the work was new to most of them, the teachers were plied with questions, and the interest was very genuine. The idea that some day the Kindergarten would be a part of the public school system was ever before the Association, and time of opening and closing was made to correspond to that of the public schools. In September, 1891, the kindergarten reopened in Odd Fellows' building with 41 present. During the year there were 114 names enrolled. The same corps of teachers had charge, but as the volunteers were not to be depended upon, the members of the Association furnished the music during the play hour. There were 60 visitors. Each Christmas, friends of the children furnished a tree with candy and little gifts so dear to the childish hearts, and the joy and gladness of the youngsters were ample reward. Sunshine being indispensable to health and happiness, the Association endeavored to give the children all they could, so with this in view, another move was made to Mr. Ivison's building, just below the Mascarel, where, in the fall of 1892, the sixth year's work was begun with 60 children, which number was increased to 125 during the year. The teachers made over sixty visits, which helped to swell the membership and increased the interest and usefulness of the work. There were 127 visitors registered. Froebel's birthday was celebrated each year by giving the children a jolly good time, and the favorite jollification was a soap-bubble party, followed by light refreshments. The children always pronounced

it "The very best party we ever had."

About this time Miss A. S. C. Blake, one of the best friends Santa Barbara children have ever had, proposed to unite with the members of the Association to collect money to put up a building to be used as a manual training school and kindergarten. The proposition was unanimously accepted. Through the efforts of Mr. Joseph Howard a subscription was started, and about \$2000 raised by Santa Barbara people, Miss Blake supplying the remainder of the sum necessary to erect the building now known as the Manual Training School. In October, 1894, amidst much rejoicing, we settled in the beautiful room now known as the Art Room, with an attendance of 58 the first day, and an enrollment of 121 for the year. There were 129 visitors. After being here just one year the room was found to be too small, as both the Manual Training and Kindergarten had grown beyond our expectations. In the summer of 1895, Miss Blake purchased the interest of the Kindergarten Association for \$2146, and with \$1000, a lot was purchased. Building was begun, when it was found necessary to raise more money, as the association had promised to incur no debt on the new building. Through the personal effort of the President, Dr. Ida V. Stambach, \$700 more were raised, increasing the amount to \$2800, and the building now known as the Central Kindergarten was completed. September, 1895, found us installed in our own quarters, and here we began another year's work with 65 children present at first and 130 names enrolled during the year. The number of children has increased steadily until during this year there have been 194 names enrolled. The teachers deserve much praise and gratitude for their faithfulness and efficiency, without which the work would have failed. In 1896, after the work was connected with the public schools, the trustees thought best to open a Training school for young ladies. Ten entered the class, but as the experiment was not a success owing to the small field, the class was discontinued the following year. From the first the Kindergarten has been purely a Santa Barbara institution, having been supported entirely by the people of the town, who recognized it as a permanent benefit to the little ones. The monthly subscriptions were always small, amounting to about one-third of the ex-

penses, which were met by entertainments of various kinds—lawn fetes, concerts, afternoon teas, valentine tea by the society men of Santa Barbara, living pictures by society people, beside Brownie entertainments and children's fairs and bizarre entertainments of all kinds, as well as by donations. There have never been any large donations from any one individual, but small sums from many persons, showing that the interest has been general and widespread. All classes and conditions have been united in trying to help this good work and have invariably responded to appeals for donations of money, clothes or material. We note with pleasure the gift of \$1000 bequeathed at his death by Mr. H. K. Winchester. As the number of pupils increased rapidly, expenses increased also, and it became necessary to provide more room. So the Association conferred with the school trustees and it was decided to make an effort to incorporate the Kindergarten into the regular public school course. A special election was held, June, 1896, with most gratifying results. A tax of \$2500 was levied on this district, which was carried almost unanimously, only about a dozen votes being against it. Next year the tax was raised to \$3500, and in 1898, \$4500 was called for and obtained. When the Kindergarten became a part of the school system the work was extended, and rooms were rented in the other wards. Channel City hall and the Unity chapel were secured. During the past year the Kindergarten Association incorporated according to the laws of the State, and then decided to mortgage their property and borrow money from the Loan and Building association to erect two new Kindergartens (to be rented to the school department), one in the Fourth and the other in the Fifth ward. Eighteen hundred and ninety-nine found the children settled in bright, airy, sunshiny rooms in place of the former unsuitable quarters. The work has been a delight from the first because of the hearty sympathy and co-operation of the entire community. Although the ladies of the Association have been discouraged many times and funds have become exhausted there was always a way out of the difficulty, because they had a generous public to appeal to, who never failed to respond, and the work has grown steadily and many, many little ones have been sent on their way rejoicing who otherwise would

never have known a better way. The membership of the Association has never been large, the greatest number at any one time being 35, and these women have raised money to cover all expenses, which the following table will specify:

Expenses for year ending February, 1888.....	\$ 771
Expenses for year ending February, 1889.....	800
Expenses for year ending February, 1890.....	850
Expenses for year ending February, 1891.....	900
Expenses for year ending February, 1892.....	975
Expenses for year ending February, 1893.....	1000
Expenses for year ending February, 1894.....	1250
Expenses for year ending February, 1896.....	1250

MARTHA D. TALLANT.

OFFICERS OF THE SANTA BARBARA KINDERGARTEN ASSOCIATION.

From February, 1887—August, 1887:

President—Mrs. Corinne Wilson.

Vice-President—Mrs. S. W. Backus.

Treasurer—Miss Anna Edwards.

Secretary—Miss Lucy H. Wilson.

Board of Managers—Mrs. M. D. Tallant, Mrs. W. H. Woodbridge, Dr. Ida V. Stambach.

August, 1887—August, 1888:

President—Mrs. Joseph Howard.

Vice-President—Mrs. S. W. Backus.

Treasurer—Miss Anna Edward.

Secretary—Mrs. C. W. Woodbridge.

Board of Managers—Mrs. W. H. Woodbridge, Miss Elizabeth Knight, Mrs. E. C. Tallant, Mrs. William White.

August, 1888—February, 1889:

President—Mrs. Joseph Howard.

Vice-President—Mrs. William Woodbridge.

Treasurer—Miss Anna Edwards.

Secretary—Mrs. C. W. Woodbridge.

Board of Managers—Mrs. M. D. Tallant, Mrs. W. H. Woodbridge, Miss Elizabeth Knight, Mrs. Abbie S. White.

February, 1889 to February, 1890:

President—Mrs. A. S. A. White.

Vice-President—Mrs. William Woodbridge.

Treasurer—Miss Anna Edwards.

Secretary—Mrs. R. S. Chamberlain.

Board of Managers—Mrs. George Edwards, Mrs. Charles Woodbridge, Mrs. I. K. Fisher.

February, 1890 to August, 1890:

President—Mrs. George Edwards.

Vice-President—Mrs. W. H. Woodbridge.

Treasurer—Mrs. A. S. A. White.

Secretary—Miss R. A. Garland.

Board of Manager—Mrs. M. D. Tallant, Mrs. W. H. Woodbridge, Miss Elizabeth Knight, Mrs. A. S. A. White.

August, 1890 to February, 1892:

President—Dr. Ida V. Stambach.

Vice-President—Mrs. W. H. Woodbridge.

Treasurer—Miss Anna Edwards.

Secretary—Miss R. A. Garland.

Board of Managers—Mrs. Dr. Winchester, Mrs. Jennie Chamberlain, Mrs. George Edwards.

February, 1892, to February, 1894:

President—Dr. Ida V. Stambach.

Vice-President—Mrs. William H. Woodbridge.

Treasurer—Miss Anna Edwards.

Secretary—Miss R. A. Garland.

Board of Managers—Miss Fanny Bigelow, Mrs. Dr. Winchester, Mrs. Jennie Chamberlain, Mrs. George Edwards.

February, 1894, to February, 1895:

President—Dr. Ida V. Stambach.

Vice-President—Mrs. M. D. Tallant.

Treasurer—Miss Anna Edwards.

Secretary—Miss R. A. Garland.

Board of Managers—Miss Fanny Bigelow, Mrs. R. F. Winchester, Mrs. Jennie Chamberlain, Mrs. George Edwards.

February, 1895 to February, 1899:

President—Mrs. M. D. Tallant.

Vice-President—Mrs. Joseph Howard.

Secretary—Mrs. C. M. Gregory.

Treasurer—Miss Anna Edwards.

BOARD OF MANAGERS:

Miss Elizabeth Knight.

Miss Fanny Bigelow.

Mrs. Clinton B. Hale.

February, 1899—February, 1900:

President—Dr. Ida V. Stambach.

Vice-President—Mrs. M. D. Tallant

Secretary and Treasurer—Mrs. L. G. Dreyfus.

BOARD OF DIRECTORS:

Dr. Ida V. Stambach.

Mrs. L. G. Dreyfus.

Miss Fanny Bigelow.

Mrs. R. F. Winchester.

Miss Elizabeth Knight.

Mrs. M. D. Tallant.

Members of the Association from 1887 to 1899:

Mrs. Corinne Wilson, Mrs. Nellie G. Backus, Miss Elizabeth Knight, Miss Anna Edwards, Mrs. M. D. Tallant, Mrs. Annie T. Woodbridge, Mrs. Lucy H. Wilson, Miss Lettie B. Calkins, Miss Lizzie H. Fisher, Miss Susan K. Wade, Mrs. Dr. Stoddard, Mrs. Jane Woodbridge, Mrs. C. A. Stroke, Mrs. Isabella MacL. Howard, Mrs. Lucy Brinkerhoff, Dr. Ida V. Stambach, Mrs. Thomas Knapp, Mrs. Wm. White, Mrs. M. A. Ashley (honorary), Mrs. I. K. Fisher, Life member;; Mrs. J. T. Gilbert, Life member; Mr. W. H. Woodbridge, Life member; Mrs. Thos. Bard, Mrs. C. C. Wheeler, Miss R. A. Garland, Mrs. C. P. Low, Mrs. Chas. Weitzel, Mrs. Nellie Harrison, Miss Roeder, Mrs. Dr. McNulty, Mrs. Jennie Chamberlain, Mrs. Dr. Winchester, Mrs. Pastora De Forest Griffin, Mrs. Brastow (honorary), Mrs. H. D. Vail, Mrs. W. Metcalf, Mrs. George Edwards, Miss Fanny Bigelow, Mrs. Charles Edwards, Mrs. Jno. P. Stearns (honorary), Mrs. Norman Wines, Mrs. Geo. Coleman, Mrs. E. W. Gaty, Mrs. Louis G. Dreyfus, Mrs. F. H. Wheelan (honorary), Miss A. S. C. Blake (honorary), Mrs. Frederic Woodworth, Mrs. Mary Scott, Mrs. F. M. Whitney, Mrs. Alfred Edwards, Mrs. A. B. Doremus, Mrs. R. J. Hall, Mrs. J. W. Cooper, Mrs. Henry Sturgis, Miss Gertrude McCurdy, Mrs. Hannah Hollister, Mrs. Walther Otto.

Outline of the Past Year's Work.

The Santa Barbara Public Kindergartens were opened August 29th, 1898, with an attendance of 150 children in the four kindergartens, and with eight teachers. The increase in attendance makes the present enrollment 194, while the actual number in attendance during the year is 290.

In organizing the plan of work, it was decided that the most advantageous use of the afternoons would be in following a course in child study, meeting together for conference and exchange of thought, visiting the sick, attending parents' meetings, visiting parents for information regarding the children, and distributing necessary clothing.

THE KINDERGARTEN SEMINARY: The conviction that the existing methods might be advantageously modified, and the trend and scope of those methods so directed as to be kept within the channels of a practical preparation for school life, led Superintendent Burk to form a Public School Kindergarten Seminary, for the purpose of study and investigation of subjects having a direct bearing upon the welfare of kindergarten children. These meetings were held once a week in the afternoon, when reviews of articles and books by well known educators, scientists and students of child life were read by members. By this method the following subjects were carefully reviewed and discussed: Barnes—Punishment as Seen by Children; Brown—Notes on Children's Drawings; Buckman—Babies and Monkeys; Hall and Ellis—A Study of Dolls; Darwin—Instinct and Play in Descent of Man; Karl Groos—The Play of Animals; Hall—Children's Lies; Johnson—Education by Plays and Games; Lloyd Morgan—Habit and Instinct; Morgan—Animal Life and Intelligence; Morrison—Juvenile Offenders; Mumford—Survival Movements of Human Infancy; Robinson—

The Primitive Child; Schallenberger—A Study of Children's Rights; Herbert Spencer—Instinct; Susan E. Blow—Symbolic Education, Chapter on Meaning of Play; Taylor—Primitive Culture; James Sully—The Imaginative Side of Play; Gulick—Some Psychical Aspects of Muscular Exercise; Sully—Studies in Childhood.

These meetings were well attended, several members from outside having joined, making the membership eighteen. The interest was so earnest and well sustained that the teachers of the other departments urged the superintendent to give them an opportunity for similar work, and the seminary suffered the pangs of dissolution only to find re-birth in the Education Club, which comprises nearly all of the public school teachers of Santa Barbara, who hear each week lectures on neurology, psychology and kindred subjects of interest and value to teachers.

SUPERVISOR'S MEETINGS: Once a week the kindergartners have met their supervisor for discussion of the week's work and observations, considerations of first grade criticisms and requirements for a practical preparation of the children for school life, and use of kindergarten material to that end, with the view of reaching uniformity in the results of their work. The discussions of methods for developing the counting, number, drawing, and story interests, the effects of choice of material and freedom of expression have been of interest and profit to the kindergartners.

They have also devoted much time to visiting the absent and sick, coming into touch with the parents in this way, and through the kindness and co-operation of Father Stockman have distributed donated clothing where necessary.

During the first few months the regular kindergarten work was carried on, but as the studies in the seminary progressed, the necessity for modifications in the method of the kindergarten became evident. There is a knocking at the kindergarten's peaceful and prosperous door, a sound of many voices demanding to be heard—voices from little children, parents, teachers, physicians, psychologists, neurologists, students of child nature—beseeching, suggesting, urging, convincing, threatening, commanding us to throw down the barriers of self-complacency behind which we have so securely entrenched ourselves,

and to listen to the voices of modern investigation and practical experience. Some intelligent kindergartners have already thrown down many traditional implements of their craft, and as they rise to open wide the door to modern research and progress, see the intricate weaving mat and the diminutive folding paper vanish with only a parting sigh of regret—regret for the choice and logical sequences so painstakingly labored over, so conscientiously administered; for the elaborate story, with its adult moral faithfully ingrafted upon the child's dawning spiritual life; for the carefully prepared dictation with gift or occupation, which has so sweetly and craftily sought to convey adult scientific instruction to the unconscious little one; for the æsthetic games which they have performed with grace and conscientious adherence to traditional modes of exhibition.

The thoughtful kindergartner bids the new tendencies welcome—the little child, with his untrammelled and naive revelation of himself in play, his interests, his longings, his necessities; the mother, with her divine intuitions, her knowledge of his pre-natal and home influences; the primary teacher, with her practical suggestions for preparation for school life, so soon to be entered upon; the physician, with the solemn words of warning concerning injured eyesight, nervous complaints, precocious brain development; the neurologist, with the revelations of modern investigation regarding the extreme delicacy of the nervous system, the importance of developing the fundamental activities fully, at the period of their nascencies, and the danger of forcing prematurely the fragile nerve fibres; the psychologist, with the demand that play, in its broadest sense, with every incentive for its free expression, is the child's rightful inheritance, his only duty toward himself and humanity, the only safe, sure foundation for a life of usefulness to himself and others.

After ten years of close observation of kindergarten children, during which time I have committed many an educational sin in mistaken enthusiasm, and in watching the effects produced upon the children by my misguided and unholy zeal, I am convinced that the modern kindergarten has outgrown many of the encrusted interpretations of Froebel's thought, that it has ventured in many lines upon the field belonging to adolescence;

that it has encroached upon the child's rights by attempting to show him a better way to play than Nature teaches him; that it has put the moral development of adolescence upon his puny shoulders; that it is more and more intruding upon the domain of the school in using the original playthings devised by Froebel, as a medium through which to smuggle sugar-coated instruction, ignorantly or willfully mistaking childish curiosity for the spirit of scientific investigation. Doubtless this curiosity judiciously fostered and gratified may lead to a desire for scientific research in adolescence, yet in the kindergarten the spirit of scientific investigation, as such, is in its embryological sleep.

That children have gone home from the kindergarten with flushed faces, tired eyes, poor appetites and irritated nerves has been frequently reported to me by mothers, and upon urging a candid expression of opinion from them, some have ventured to say that possibly we are trying to teach the children too much at once.

We conscientiously spend the entire afternoon in making elaborate preparations for more flushed faces, tired eyes, poor appetites and irritated nerves upon the morrow. We want Johnny to learn songs appropriate to the season and the weather, the æsthetic significance of which is so obvious and would be so valuable if he only understood the words. However, Johnny is equal to the occasion and frequently improvises words which have a more direct meaning to him than those offered up to the shrine of his spiritual nature. We expect him to remember what we tell him in a morally or scientifically instructive story; he must learn the words, music and movements of the so-called games; he must sit in quiet and decorous attention while he follows to the letter dictations with the gifts which would often tax the ingenuity of an adult, who often expresses amazement at Johnny's ability, as well may he; Johnny must show no enthusiasm over a chance or surreptitious discovery, made by himself, must place his material in accurate accordance with the dictations, and then like a good boy replace his gift into the little box to the tune of one, two, three. Will not the conscientious kindergartener recall with me many a childish sigh of relief as the eight tiny cubes are finally deposited in the proper box, with appropriate ceremony,

and see again the stretching arms and legs, aching for a run and a prance, after a period of from twenty to thirty minutes of this enforced quiet? After all this painstaking devotion to Johnny's temporal and spiritual welfare, why does he not go home refreshed and healthily hungry, eager to come again to drink of this fountain? Because he has had too much, because his mind is confused and his nerves unstrung by the numerous and varied demands made upon him.

The results of the discussion and studies made by the Seminary led to the adoption of the following curriculum early in January:

I. Prayer, Singing, Movement Songs, Stories, Mother Goose Stories, Aesop's Fables, Anderson or Grimm.

II. Blackboard Illustration of Story. Children tell story.

III. Recess. Free Play. Balls, Incentive for Individual Plays—dolls, reins, toys, bubbles, the sand pile, etc.

IV. Number—Counting or groups with objects. Beads or other suitable kindergarten material.

V. Use of objects, pictures and picture books as language incentives.

VI. Recess. Free play with incentives.

VII. Free use of clay, sand table, paper cutting or other kindergarten material without dictations.

This curriculum has been in use since January, and while at first there was some difficulty in smooth adjustment, in a month the beneficial results became manifest, the equilibrium between freedom of choice and spontaneity of expression, and proper obedience and discipline became apparent, and the beneficial effects of free play in the open air were satisfactory evidence of the usefulness of this very practical curriculum. I call it practical, because it was arranged to meet the requirements of the primary school, leaving undone those things for which the primary teacher had no time or material. Of one primary teacher, after a trial of children who had been three months under this training has a significance of peculiar meaning when she says: "The children are more obedient, more self-reliant, more prompt to comprehend my requests than any children who have ever come to me from any kindergarten."

PARENTS' MEETINGS:—For the mutual benefit of parents and kindergartners, Parents' meetings were organized shortly after the opening of the kindergartens, and held in each ward once a month. The invitations and printed programs sent out met with a generous attendance in response, the program being arranged to interest and benefit the parents, and providing a review on some phase of child life, a lesson in music, a lesson in the use of kindergarten material in the home, and opportunity and encouragement for free discussion of the subject for the day by those present.

During the twenty meetings which were held the following topics were reviewed and discussed:

Children's Play Activities; A Study of Dolls, Hall and Ellis; Questionnaire on Children's Discipline of Dolls distributed; Children's Lies, G. Stanley Hall; Punishment—Review of Barnes' Discipline; Punishment, Caroline Frear; Chapter on Punishment by Herbert Spencer; Children's Attitude Toward Law, Estelle M. Darrah; Punishment as Seen by Children, Barnes; Children's Time Sense, D. S. Snedden; Children's Drawings, illustrations of Stories; The Story Interest; Babies and Monkeys, Buckman; Food, Clothing, Ventilation, and Sleep from a Physician's Standpoint; Effects of Punishment from a Medical Point of View; Truancy, L. W. Cline. The discussion of the study of dolls resulted in a generous contribution of dolls to the four kindergartens, and a marked increase of dolls in the homes, especially for boys.

INTEREST AND AID OF THE KINDERGARTEN ASSOCIATION:—

Other gifts in the shape of toys, picture books, four sets of building blocks of large size, toy dishes, small wagon for crippled child to be used during the walks, three comfortable lounges for the comfort of crippled children, stand-table, canary birds, potted plants, large clock with swinging pendulum, swings, see-saws, money for shoes and other necessities, an abundance of comfortable clothing have been generously contributed during the year by friends interested in the kindergartens, through the helpful influence of the Kindergarten Association. Santa Barbara may well be proud of the active

force of wide-awake and progressive women, who, as an association, are a power in the community for the uplifting of humanity, by putting into the lives of the little ones those influences which promote the desire for self-activity and self-help. The amount of good work that has been done by this Association this year can not be estimated in dollars and cents, and its value to the community can not be too highly estimated by the citizens of Santa Barbara. Let these ladies once feel the necessity for any progressive change or improvement of present conditions, and the response comes quickly and generously. Two of the rooms used for the purpose being unsuitable, the Kindergarten Association, through the earnest efforts of the President, Mrs. M. D. Tallant, built two new buildings on the school grounds, planned to meet the needs and advantages of the mild and even climate of the coast. These buildings were first occupied in January. Perhaps the most novel and pleasing features of these buildings are the large sliding doors placed in two adjacent sides so that the rooms may be practically thrown open to the outside world of fresh air and sunshine, bees, birds, and blossoms, and the objection to shutting children away from the healthful influences of sea breezes and the direct rays of sunlight is reduced to a minimum. The rooms are well lighted by oblong windows placed lengthwise in doors and walls, with long shelves under the windows and above the hyloplate blackboards, where growing plants, gold fish, and objects of interest attract and hold the wandering attention of the little ones upon pleasing and suggestive objects, rather than upon blank walls, or pictures too lofty, literally or figuratively, for their simple comprehension. The advantage of separate buildings for kindergartens is so obvious as to need no comment further than the fact that there is no necessity nor excuse for suppressing the spontaneity of child life where the kindergarten is independent of the restrictive outside conditions, which a too close proximity to the school is certain to impose. Too much credit can not be given to the self-sacrifice and indomitable equanimity under discouragements of Mrs. Tallant in securing, through the co-operation of the Association these modern, up-to-date buildings, fitted with all that loving hearts and wise heads could suggest for the comfort

and happiness of Santa Barbara's little ones. She has proven through her connection with the Association as a charter member for thirteen years, her wise management as president of the affairs of that body for five years, her regular attendance at seminary and teachers' meetings, a devotion to the cause which she upholds, which makes her as true a friend of education and the children, as ever could be said of Froebel.

The present president, Dr. Ida V. Stambach, brings to the work as staunch a friend and vigorous a worker as the foregoing president. One of her first acts was to bring before the notice of the Association the value of a covered pavilion where the children might work and play in the open air in large sand bins, where they could be protected from the heat of the sun, yet receive the full benefit of its healthful influence. The result is a fine pavilion in the Third ward, with ingenious arrangements of hinged shelves, so that the children in pleasant weather may be out of doors the whole morning, working, modeling, drawing, singing through the flying moments, which makes a morning of happiness all too short for the contented children.

ORPHA M. QUAYLE, Supervisor.

Some Neurological Conditions of Childhood.

The essential contention of education viewed from the standpoint of modern child psychology is that there are epochs or stages in the child's mental and physical growth, that each higher stage is reached by passing through a more primitive stage, and that the lower stage may be essentially different in character from the higher stage. For example, it is clear that the moral nature of the adult is only obtained by passing through lower phases, many of which are "unmoral" or even immoral judged by adult standards. The criticism which is passed upon many of the attempts of the old education is that efforts have been made to make late activities and conceptions grow in lower stages. The modern sciences have done much to establish the truth of this contention and child psychology in the past decade has been busily engaged in gathering data from the various sciences and by observation of its special field to mark out the fence lines of these stages in the development of the various physical and mental activities, though of course, as yet, results are by no means clear and definite in detail. We are yet in the pioneer phase of the work.

✓ The struggle between the old and new education is perhaps more difficult in the field of kindergarten education than in school education for two reasons: First, the kindergarten is furthest removed from adult life, consequently the antithesis is most marked and efforts to force adult activities are necessarily more striking. In the second place, school education, especially in America, is more largely a product of experience, while the kindergarten scheme of education has been derived more purely from philosophy, and again especially in America, it has been promulgated chiefly by the Hegelian metaphysical movement. The sweetly poetic and pantheistic conceptions of Froebel have been translated and interpreted into the still more vague metaphysical phraseology of the Hegelian school

until the real experience products of Froebel's teaching have become will-o'-the-wisps in the burying ground of a deceased cult of metaphysics.

Modern neurology is giving the principle of stages in development a sound scientific basis. We have learned that the nervous system, which is an essential factor not only in all physical but in all mental activity as well, is a republic of more or less independent parts, each having for its function some particular physical or mental activity. While as yet the location and connections of these parts have not been fully mapped out in detail, yet several are known—the centers of the various bodily movements, of sight, hearing and speech in the brain cortex, for example. Secondly, we know that the nervous system is constructed upon a plan of superposition of structures. The centers for the cruder, more inaccurate movements of the arm and hand, for example, are located in the spinal cord. The more accurate, delicate control of the fingers, arm and hand, which have been developed by the more modern forms of civilization, is directed by cells in the brain. These cells do not send out fibers to the arm directly, paralleling those from the original cells in the spinal cord, but they send down fibres merely to these latter cells so modifying and introducing new factors into their direction, that the muscles gain new powers of accuracy, delicacy and possibly of strength. This fact is neatly shown in forms of paralysis where the disease first attacks the brain cells of a certain area; not all the movements of the member become affected, but only the more accurate and delicate, for the reason that the movements controlled by the lower centers in the spinal cord are still healthy. Thirdly, mainly through the researches of Dr. Paul Flechsig of Leipzig upon the nervous system of the foetus and infants, it has been clearly shown that these levels, or layers, of the nervous system begin to mature at different periods. The spinal cord is well matured at birth, while the brain cortex is wholly immature. The movements which occur before, and many of which occur for a long time after birth are directed wholly by cells in the spinal cord, medulla oblongata and pons. Gradually, and by definite periods, cells and fibres ripen in an upward direction, commencing first in the areas ly-

ing about the fissure of Rolando which controls the bodily movements; in the visual area, located in the occipital region; and the auditory centers, located in the first temporal convolution. Flechsig shows further that throughout the brain the other areas have different and more or less definite times for coming to maturity so that they can be used. On the other hand, the facts derived from studies upon the brains of insane adults show a progress of disease in the reverse direction by similar stages. In fact, with the introduction of the level principle in the application to mental disease in England some thirty years ago by Dr. Hughlings Jackson, medical practice has been entirely revolutionized and placed upon a new basis.

Education is now struggling for the same principle in pedagogic practice. With the recognition that the nervous system is built up by superposed layers, that there is an order, established by fixed laws of heredity, in the order of development of these nerve cells and that it is necessary for the lower layers or levels to be fostered and developed to their legitimate maturity by suitable exercises, to the end that the next higher levels of nerve centers may have a substantial basis, we step firmly to the pedagogic application that there are superposed levels in the child's education, that there is an order of development established by fixed laws of heredity, for the deeper and more fundamental activity of mental and physical life. From this standpoint, we must recognize pedagogically that there is, for example, a system of primitive child morals, derived from heredity, which must have its period before adult conceptions of morals can be developed. So with art, literature, number, reasoning, religion, play, physical culture, etc. And on the other hand, we must not be zealous in forcing upon the kindergarten child adolescent forms of these activities, for the child is not a little adult, but rather a seed.

Flechsig's studies, however, deal merely with the beginnings of development of nerve centers. His method is not serviceable when the nervous system becomes so well developed and complexity baffles the powers of the microscope. Other investigators, however, have shown this principle of development is continued very actively throughout childhood and

adolescence, and in lessened degree throughout adult life until the disintegration of old age sets in. There are no clean-cut breaks in development we know, and while we cannot lay off, except arbitrarily, the beginning and ending points of the growth period of any activity, nevertheless we may perhaps recognize certain classes of activities as predominating in certain periods of life. We have seen that the first centers of the nervous system to develop are those of the spinal cord, medulla and pons, controlling the more primitive movements of the body, that some months later the centers of the higher level of these movements, located in the brain cortex, representing the more delicate and accurate modifications of these movements, together with the sense centers of sight, hearing, touch, taste and smell, begin to mature. The first level has its period of predominating nascency in the embryological period and during infancy. The second level begins in infancy and continues as a predominating activity until the child is six or seven years of age, facts of observation assure us. Later is a period when the centers lying about the sense centers and those for bodily movement and representing a still higher level having to do with memories of things seen, heard, felt and tasted and their associations develop. We know from researches upon the brains of the insane, from aphasic patients and those suffering from paralysis, that there are such areas separate from the lower levels of sense. For example, there are cases of patients who hear distinctly the sound of words spoken to them, but are unable to understand the meaning. Post-mortem examination has shown a healthy condition of the auditory sense center in the temporal convolution, but diseased conditions are found in adjacent area lying in the supra-marginal convolution. These patients are in an analogous condition to the infant who can hear sounds, but the adjacent center for obtaining meaning from them is as yet undeveloped. Again from objective observations upon children we may come to the tentative conclusion, roughly speaking, that the period from six to seven until eleven or twelve represents a period of predominating activity in these still higher levels of nerve centers representing the memories of the senses and their associations with other centers which give a wider range to thought.

Still the child can not reason without the presence or clear memory picture of the object. He has no abstract conceptions, nor can his thought travel far without the aid of objects, sensed or remembered. There are regions of the brain, representing considerably more than one-half in area, which seem to have nothing directly to do with the senses or bodily movement. They may be severely injured without causing death or any great impairment of bodily or sense powers. Many students unhesitatingly attribute to them the functions of higher reason, abstract thinking, etc. There is much in the study of the insane and aphasic patients to sustain the view. It is further held by some, upon grounds of neurological observation, that the cells in this region constitute the highest levels, that the fibres do not extend great distances, but merely reach to the cells of the sense areas already described. They bear the same anatomical relation to the cells of the next lower level, that the cells in the lowest brain levels bear to the cells of the spinal cord—i. e., they extend down and modify and more or less control the lower cells, introducing new, more accurate and delicate activities. Again there is much evidence to show that they are the latest of all brain structures to mature. From the standpoint of observation of human action, we perhaps may put their predominating growth in the adolescent age, from 11 or 12 to 25 years. They do not parallel old forms of activity, but modify them. Following the principle of nervous growth, they need for their healthful existence the lower structures, and these lower structures must have made full use of their growing period in order to constitute a healthy basis for the highest level.

Summing up, we may conclude tentatively as to details, that we may see three or four great periods in the development of the child—first, a period of early infancy, when the predominating amount of growth is taking place in the spinal cord and lowest centers; secondly, a period extending from infancy until six or seven, when the predominating growth takes place in brain levels of bodily action and in the sense centers; thirdly, a period from six or seven until puberty, when the predominating activity is in the level above the sense centers, memories and their association one with the other, and these are intro-

ducing their modifying influences upon the lower centers; fourthly, the period of adolescence, when from the highest levels the entire nervous system is again centrally co-ordinated, the power of thought without the direct use of objects or their memories becomes possible. So far as neurological data give evidence, the order of development is ever from those structures which are oldest in the race towards those which are the most recent. The child repeats in a general way at least the tendencies of his hereditary history, and in the order of racial evolution. The lowest centers, which are the most primitive are least subject to modification. They represent what is instinctive. Education, in the sense of modification of hereditary bends, is now least possible. Education, for these, is exercise of them. Education, as a factor of modification, is best applicable to the highest and latest structures. The kindergarten child thinks in his lower brain levels and demands from education the opportunity and incentives for free activity of his lower instinctive activities to the end that by their strengthening, education by modification in the adolescent period shall have a well developed foundation. The function of education for adolescents may be, and doubtless should largely be, the adaptation of the pupil to the world in which we live—to its conceptions and methods of material living, of literature, of art, and of morals and religion. His highest nerve centers are pliable, easy to bend and train to form new associations. But the kindergarten child is yet passing through the deep worn ravines of primitive life. His morals, his art, his literature, his religion are of a primitive type, dealing largely with bodily movements, sense ideas and their memories. Much of it, doubtless, is mere scaffolding which must be substituted for when the highest centers of his brain take control. We must let his tendencies lead us to the end that he may as an adolescent follow ours.

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FREDERIC BURK.

Physical Culture.

The kindergarten ages cover a period when the largest proportion of the movements of the human body are becoming adjusted and co-ordinated. It is the period pre-eminent of the adjustment of nerve and muscle in all the coarser, more fundamental movements. Neurological investigation of recent years has shown that the first portions of the brain of the infant to mature are the sensory motor centers having to do with bodily movements, lying about the fissure of Rolando, and on the side of child observation it is to be noted that for the first six years of life these activities are passing through their periods of nascency. The child is actively exercising his body, legs and arms in their more general and cruder usages. It is the period of instinctive movements when the child is receiving from race heredity the movements and actions his ancestors have used. In a later period he adds those finer adjustments of finger and eye in accurate manipulations which are the products, to a greater degree, of his own individuality and experience. The movements he makes, the plays he most enjoys, the exercises in which he most readily takes part, are those in which children of all human history have ever participated, and which for primitive man constituted his chief employment. There is reason for believing, in conformity with these facts, that the portions of the child's nervous system which are maturing up to six or seven years of age are those which are old and well established, racially—structures so well determined that attempted modification of them by corrective training is difficult if not dangerous.

Roberts, the English anthropometrist, reports that while it is easy, by systematic exercise, to develop the body of the boy after twelve or thirteen years of age, it is not possible to

do so before that time—the muscles will not “train.” There are many physiological changes which take place during the pubertal age to account for this fact. The nascent period for growth of the lungs, which seems intimately connected with the development of strength and muscularity in general, is after twelve years. About half the strength of a boy of sixteen years is acquired in the last four years of that period, as shown by the dynamometer tests in America and England.

Physical culture in unfortunate parlance has come to mean a set of calisthenics, æsthetic marchings, systematic plays or dictated games. Experience, pedagogic theory and hygiene make it equally questionable that such exercises have any place in the kindergarten. There is no evidence in the childhood period of any system of logical order in the development of the various human movements, nor of any system to which we have a practical key. On the contrary, movements appear in childhood in a series that to the adult mind with love of orderly system seems vagrant caprice. The infant at birth is born with a power to grip the hand with a force that is marvelous, yet he is unable to use his thumb until five or six months are passed. The tendency of most young infants, again, is to use their eyes independently, and it is only until several months are passed that co-ordinated direction of the eyes is firmly established; yet, on the other hand, an infant is several months old before he can direct one hand in a movement without having the other hand duplicate the same movement. Why should a two-eyed and a two-handed human child grow out from bilateral movement in the case of the hands and into it in the case of the eyes? The immediate cause, of course, is in certain inherited structural arrangements of his nervous system, finding root, doubtless, in the fact that throughout all lower animal life the use of the forelimbs has been bilateral, while the eyes have moved, largely, independently of one another. These are merely illustrations. The order of early development is regulated by internal heredity, and deeply worn laws, and we pedagogues have not yet copied them from nature's text book.

Does it follow, in consequence, that physical culture has no place in the kindergarten? By no means. As will be

shown in the study upon the spontaneous physical activities of the Santa Barbara kindergarten children, nature has provided her physical culture school in children's instinctive plays, and her instructor in their instinctive preferences for this play or that, is interest. When our stomachs need food, hunger informs us; when overwork intervenes, fatigue warns us. When the time arrives for the bird to learn to fly, a child to creep or walk, an instinctive feeling impels the activity. When the nerve cells which control any activity become mature, their surcharged energy tends to discharge in certain courses of movement. Children's instinctive plays are the products of these impulses. The games made up of jumping, running, pursuing, throwing, do answer these instinctive impulses. They are the products of ages of natural selection. The plays which do not give the discharge to these inner feelings have been discarded, while those which do are called into requisition repeatedly. Nature is also a guide to the amount of exercise. Weariness compels quiet and time for recuperation. When we think of the number of physical movements which are passing through their critical periods of nascency during the kindergarten period, their delicacy, and the necessity for the untrammelled freedom to play or to rest, we cannot but be brought to the realization that the intelligent attention of the kindergarten should be given to this field of education. As stated, it is impossible to prescribe the system or order of exercise, for those are matters beyond our ken, but the kindergarten can guard the child's right to play, encourage it by providing free and frequent opportunities and incentives for all kinds of exercise—clean sand to roll, build and model in, mounds to jump from, trees and poles to climb, balustrades to slide from, paths to run in, bushes to hide in, balls to throw, hammers with which to pound, garden tools, saws, and plenty of room for romping, chasing, and other similar activities. Not only can the kindergarten, thus directly, give incentives for the free plays, but the suggestions which the kindergarten offers will be used in hours at home. And where is time for all this play outside the regular kindergarten curriculum to come from? Frankly, I do not know. When we think of what an intelligent kindergarten could accomplish in thus protecting the

child's right and need for his instinctive plays, the all-day kindergarten with at least half the time scattered about in free recesses seems to rise as the institution of the future. But certainly under present conditions we have no right, pedagogical, physiological, or hygienic, to pen up children, from four to six years of age, for three hours with only one recess of fifteen or twenty minutes. The excuse frequently offered that children are engaged in the kindergarten games is an untenable one. In the German schools numerous psycho-physical tests have been made upon the recuperative value of turning, gymnastic exercises, etc. It has been shown that these are more fatiguing than the mental school work and should not be interpolated, even in the higher school grades, as a recuperative means. Kraepelin, the foremost investigator of the influences of fatigue, condemns it, and the studies of Wagner, Kemsies and others agree in the same conclusion, and further that spontaneous play is less fatiguing than the set exercises. The essence of play for young children is that it should be directed by the hereditary and instinctive impulses from within, and the æsthetic, or morally instinctive games of the kindergarten are to be ranked with a diet of beefsteak for suckling infants—they are grossly premature.

II. DRAWING, AS HAND AND EYE EXERCISE. As soon as the child enters school, at the age of six years, he is taught to write—an exercise of hand and eye co-ordination of extreme delicacy. This is not the place to discuss the hygienic justice of the requirement of the primary school. The simple fact is that children of six years are required to write, and probably will be, despite the wrong or the right of the matter. Can the kindergarten prepare the child for this sudden demand upon hand and eye adjustments? Fortunately, the facts are clear that the child is favored in the matter by two strong instincts admirably adapted to serve the purpose of preparation—the instinct for ball throwing and the instinct for drawing. If balls are kept in access of children there will be found few recesses at which they are not in use. The throwing of a ball exercises the more fundamental adjustments of arm, wrist and hand, and serves as a valuable preparation to all hand movements. Any one who doubts its value

should read those two educational classics, by Edouard Seguin, "The Psycho-physiological Training of the Idiotic Hand," and "The Psycho-physiological Training of the Idiotic Eye." The drawing instinct will later be discussed as a language incentive. Let us now regard it as a physical exercise in preparing the hand for the more delicate adjustments of writing. It should commence with blackboard exercises and illustrations of stories of interest. The blackboard position prevents a rest of the wrist with that cramped use of the fingers, and insists upon large, free arm movement. The chalk does not require the finger strength which a pencil does. Gradually, however, work with the pencil upon paper may be used, but always in such a free way that the child does not weary. Later the brush and the water colors may find useful place, for the brush requires a light touch and prepares the child to avoid that cramped twist and gripping of the pen we so often see in the primary schools as a certain evidence that the hand is yet too immature to use the pen.

Clay modeling, also, has here its place, provided children are not unnaturally forced to strive for æsthetic ideals or mathematical exactness of form, for which instinct has as yet made no provision.

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FREDERIC BURK.

PRACTICAL APPLICATIONS.

When I first entered upon my kindergarten career, when I knew vastly more about the methods with which the kindergarten should be conducted than I do now, the circle was to me the most awe-inspiring institution,—a most cherished symbol of unity. Truly, it lies within the realms of sacred tradition; little toes have balanced upon the painted line for nearly a generation, and so powerful is its circumferent force that no well bred child will stray from the path of virtue to put into exuberant drama the thoughts inspired by the story of the "Three Bears," or "Jack be Nimble, Jack be Quick;" nor will a daring flight of fancy be attempted by the timid fledgling, standing with toes planted with geometrical precision upon the exact spot which indicates the revered center of this magic and all-powerful fetich, the circle. In the well-conducted and properly-disciplined kindergarten of to-day, the child is dis-

tinctly made to feel that he is out of harmony, that he is selfishly indifferent to the welfare of the other children, that he is responsible for the unhappiness of the kindergartner, if he wanders away from this visible pale of propriety to seek the satisfaction of unplanned, spontaneous play, and the expression of his needs and feelings in his own childish way. He is left to think over his sinful condition, away from his patient and less ambitious companions; the kindergartner withdraws the light of her countenance from his soul, and in the chilly gloom of this atmosphere, the little culprit wonders why he is so punished. If we attempt an honest answer to the unspoken query of the child, we shall see that he is punished for the ignorance of the best-of-intentioned adults who are trying to force him out of a natural expression of himself through the only channel which Nature has provided, into one which is abnormal and unsatisfactory—to him at least.

The plays and activities of children at this age are almost wholly individualistic, their interests are individualistic, and not until a much later period of their development should we consistently look for that unity of purpose and action of which the circle is the symbol. Dr. Gulick has shown by his investigations that traditional and organized games belong to a later period of childhood. "The plays of early childhood are individualistic, non-competitive, and for the accomplishment and observation of objective results."*

If this is true, the kindergarten organized games performed upon the circle, while reflecting the most amiable intentions of adults toward children, in preparing æsthetic renditions of traditional games, are still games from the adult standpoint, rather than the expression of the spontaneous plays of children.

The crudity, lack of unity of purpose, and exuberant expression of the play spirit when left free activity, interferes with the apparent harmony and smoothly-running schedule of the kindergarten, and is therefore unpopular among many kindergartners. In too many of our model kindergartens the demure little lads and lasses have "learned to play" the games so perfectly that the favorite time for visiting the kindergarten,

*Some Psychical Aspects of Muscular Exercise. Dr. Luther Gulick, Pop. Sci. Mo., Oct. 1898.

with many unthinking child-lovers, is during the period devoted to this spectacular performance. For how long shall we kindergartners caper and prance, conscientiously devoting our best energies of heart and brain to teach these open-eyed and wondering children how to play? Might we not more profitably learn of them?

The conviction, for years latent and urgent for recognition, that free play is the only rational solution to Froebel's plea for self-activity, the undoubted truth of the revelations of child study with regard to the ancestral and racial traits of childhood, led to the adoption of two recess periods of 20 minutes each for spontaneous play in the kindergartens, to take the place of the regular kindergarten games, and the eagerness with which the play incentives were appropriated and put into active service by the children revealed the strength of their interests. At first, but few incentives were given, owing to ignorance of the best incentives for their use, but as observation and experience strengthened theory, the list gradually increased and modified the original provision made. To a few bean bags, tin street cars, wooden soldiers, and a cloth elephant, whose only recommendation for popularity was his obliging disposition in sacrificing his dignity by becoming a football, and who was rescued from the sure fate which overtakes all who tamper with the game, have been added in the order named, sand piles, dolls, toy dishes, toy brooms and dust pans, toy washboards, reins, gas balls, hammers and nails, garden tools, footballs, facilities for climbing, jumping, see-saws, swings, and the latest achievement, a children's play house, where the tiny housekeepers can keep the miniature family in the most approved manner, and still have the benefit of the fresh air and sunshine.

The bean bags, the wooden soldiers, the tin street cars, and his lordship, the elephant, have been consigned to the oblivion of deserved rest—but the sand piles have still the busy chattering groups of little ones, digging wells and tunnels, molding and baking in the sun the succulent pies and cakes so well-known to our own happy childhood, sifting the clean, dry, fascinating sand until the sudden temptation to send a mimic cyclonic deluge over unsuspecting comrades is only diverted

into more legitimate channels by the prompt action of the ever-vigilant and ever-present kindergartner.

The dolls, the toy dishes, brooms, washboards and flatirons have a full share of attention from girls and boys alike. The house is swept and garnished, in the enthusiasm of play, some children considerably sprinkling sand upon the floor, that the broom may have excuse for action; the doll clothes are washed vigorously in the sand with washboard and wooden soap, and ironed while the iron is cold; the dishes are washed and dried with imaginary water and towels; the dolls are washed and dressed, one-eyed Rosie, of long-suffering visage and pathetically dangling appearance being cuddled and loved and lullabied with the fairest in the land; while the hostess sets the table, not omitting the tiny vase of weedy blossoms gathered for the purpose, and proceeds to serve to the sedate and expectant guests a banquet fit for the gods. Sand is the basis and inspiration of the entire menu, and the dignity and propriety of the occasion is not marred by any unseemly behavior, or the necessity for correction to the verge of tears—there is no painted line here to say: "Thou shalt not."

This seems like co-operative housekeeping, but no such adult occupation is in reality the case. Each child is entirely absorbed in her own particular bit of drama, and cares not a whit about the success of the whole.

Meanwhile, fiery steeds, restless chargers, and good, safe family horses are being driven about the grounds, with long grass tucked under the hat brims for manes, with tinkling bells, and drivers with healthily exercised lungs to keep them in subjection; bread, milk and vegetables are delivered without money and without price to all who may ask. Without rest, or the usual variation of eating and sleeping, with only an occasional visit to the blacksmith for repairs, these horses and their remorseless drivers, like Tennyson's brook, "go on forever."

The gas balls occupy the attention of another group of children, and, tossing, rolling, bouncing, gain for the hands and eyes a co-ordination which does more for the judicious development of accuracy of time and movement than could be acquired in any other way.

Hammers, footballs, climbing, jumping, swinging and see-sawing are all in active operation at this time, making the twenty minutes all too short in which to enjoy the delights of free play.

If you would ask for the whereabouts of the kindergartner during this time, if you imagine that she is quietly resting in a hammock in some secluded spot, I would answer that this is her harvest time for child study, and as she keeps her eyes and ears alert for her needed presence here, there, and everywhere at once, and her loving heart ever ready to meet the numerous calls upon her patience, her strength and judgment, she now and then snatches a moment to put into her note book the record of the day's revelation of Johnny's and Jenny's most baffling characteristics.

The bell rings, the sand piles are deserted, the beloved dolls kissed and left staring after the tender little mothers, the toys are replaced in their boxes, the swings once more resume the perpendicular, and in three minutes, where all was life and animation, quiet reigns until the reappearance of the merry little ones.

ORPHA M. QUAYLE.

PLAY:

A STUDY OF KINDERGARTEN CHILDREN.

[Reprinted from *Northwestern Monthly*, March-April, 1899.]

For about three months the kindergartners of Santa Barbara have made systematic observations of the children's spontaneous play during the two twenty-minute morning recess periods. Each kindergartner has a note book and every day records her observations, putting down, more or less descriptively, what the children play.

In the four public kindergartens there are from 140 to 175 children from four to six years of age, representing all conditions of life from the white-ruffled little Fauntleroy to the bare-footed, freckled youngster in blue jeans. As for cosmopolitanism, besides the California-born Americans, there are a few children of eastern tourists, a decided sprinkling of Spanish and Mexican urchins, a number of Italian-born, and a Chi-

nese pigtail or two—a composite that certainly ought to yield something generic.

Over one hundred specific varieties of spontaneous play were observed, and these fall easily under the following heads: 1, Plays of Physical Action; 2, Representative Plays; and, 3, Traditional Games. Any set classification is more convenient than strictly just. The representative plays, while distinguished by the imitative and dramatic elements, often involve an immense amount of physical action. The traditional plays, those handed down from generation to generation in the shape of formulated games, such as "London Bridge," are based both on physical activity and on the representative idea. The following table shows the distribution of the plays observed without any cross classification:

Plays of Physical Action	about 25 varieties.
Representative Plays	" 67 varieties.
Traditional Games	" 12 varieties.

Plays of physical action and representative plays characterize almost exclusively the free activity of the kindergarten. These two fields give not only the greatest diversity of physical and psychical action, but they furnish certain types of play which run day after day, week after week, till they seem to be woven into the very life of the child. The traditional games, while presenting some, though a comparatively limited variety, would, if further compared with the less organized activities as to the number of times played, fall into utter significance.

PLAYS OF PHYSICAL ACTION.

The list of physical plays—those in which the play instinct is manifested simply in the outletting of physical energy—as I gather them from the note books, runs heterogeneously in this fashion: aimless running, wrestling, racing, sliding down banisters, jumping, ball (throwing against the house, throwing to each other,, bouncing and catching, tossing in the air, rolling, kicking, batting), swinging, somersaults, climbing, see-saw, throwing sand, grass, or marbles, trickling sand through the fingers, digging, walking beams, pulling children off the steps, etc. Ball in its various forms is decidedly the

most popular of the plays of physical action, followed by jumping, swinging, sliding, climbing.

The practical question is not so much what the children do as what exercise comes out of what they do in their physical plays. Let us see what sort of physical culture teacher the child makes for himself in his natural play. I have made a very rough classification of the plays of physical action according to the prominent bodily movements they involve, leg movements, arm movements, etc., as shown in the following table:

Running.	}	Leg movements.	
Aimless.			
In many plays.			
Races.			
Skiping.			
Kicking.			
Ball, bean-bag, toy elephant, etc.			
Jumping			
Up and down.			
Along the ground.			
Off steps and benches and fences.	}	Arm movements.	
Rope.			
Digging with the feet.			
Walking cross-beams.			
Throwing ball, sand, etc.			
Tossing ball.			
Bouncing ball.			
Batting ball.			
Somersaults.		}	Complex movements, arm, leg, trunk.
Wrestling.			
Tumbling.			
Rolling hoop.			
Climbing.			
Falling on the sand.			
Pulling children off the steps.			
Trickling sand through the fingers.		}	Hand and finger movements.
Squeezing air out of ball.			
Catching ball, etc.			
Building in sand.			
Swinging.	}	Motion through air without effort.	
Sliding down banisters.			
See-saw.			

The legs are two very important servants to his young lordship, and he sees that they are well trained. He gives them an indefinite amount of running. At first this is aimless, the child "just runs," or he runs and tumbles in the sand. He runs in almost every game he plays, and when he really goes into the business of it he starts up a racing match. Then he kicks. He kicks the ball, he degrades the bean-bag into something to kick, and he kicks the toy elephant till life is quite extinct. To running and kicking add jumping—jumping up and down, jumping off steps and fences, jumping along the ground, jumping rope—and I doubt if you will find many idle muscles in any legs from four to six years old.

A distinctly arm movement is accomplished by throwing—throwing ball ad infinitum, and by way of substitutes, sand or grass or what not.

Many plays give more complex movements, exercising both arms and legs and the trunk also, and requiring co-ordination of the whole body. These are somersaults, tumbling, wrestling, climbing, tugging, etc.

Then there are hand and finger movements—trickling sand through the fingers, squeezing the ball, catching the ball, making sand structures, etc. It is the *grip* movement that characterizes chiefly the exercise of the hand and fingers.

All these movement plays require effort, and yet not effort to any intense degree or any finely concentrated degree. In other words, these games give free exercise, but there is a decided lack of games of competition or of force, and also of games involving fine accuracy or skill. Only a few cases of competition were observed. There were occasional races and isolated instances of seeing who could throw the ball the farthest or catch it the most quickly or toss the bean-bag the highest. Three cases of force are recorded, two of pulling—pulling children off the steps, and pulling the reins from each other to test the strength—and one of lifting, the smaller children trying to lift the larger ones.

There were no games requiring fine accuracy of hand or eye. In throwing there was not much aiming at a mark. The nearest approach to aiming was in throwing the bean-bags into the hole in the board and in hitting a marble off the top

of a sand-mound with another marble. The bean-board met with no enthusiasm, however.

Beside the movement games requiring effort and so giving exercise to the various muscles, is another set, the delight of which seems to consist in their ability to give movement and motion without effort, as swinging, sliding down banisters, see-saw, etc. Motion through the air seems to possess a peculiar charm, to give a general sense of freedom, excitement, exhilaration, an unconscious "getting on the good side" of the Law of Gravity (for said Law of Gravity is not always in a friendly mood). The element of rhythm in swinging and see-saw doubtless contributes much to the charm.

In general, the games of physical action may be characterized by 1, their lack of competition; 2, their moderation both in intensity of force and accuracy of skill; 3, the variety of muscular exercise afforded; and most important, 4, the fundamental nature of the muscles involved.

It is a noticeable fact that in this running, kicking, jumping, throwing, swinging, sliding, climbing, wrestling, turning somersaults, etc., only the fundamental movements are brought into play. Our tree-dwelling ancestors might have performed and did perform any and all of these movements, so that they are handed down to the child's nervous system with such a long and reputable list of references that he is fain to make good use of them, before ever he is ready to attempt the newer-fangled, accessory movements of finger, hand, and eye that have been added to the curriculum of life by his nearer ancestor—man. The bearing this fact has on kindergarten work is obvious. If we take the cue from children's natural play we must bid God-speed to the already departing "fine" work and the "accurate" work of the kindergarten.

It is tolerably evident, too, that no system of calisthenics can take the place of or even compete with the set of exercises in which Dame Instinct instructs the kindergarten child. Her "system" is quite as complete as most systems furnished by the logical adult—and not half so stupid either. Dame Instinct, too, knows all about "nascent periods," and just when certain aptitudes arise or die out. She does not begin too soon and so force the nerve or muscle; she does not carry on work too

long, and so over-fatigue them or nauseate the interest, but she "strikes the nail on the head" every time. The problem is to give her plenty of time to work in and when she calls the children out for at least two recesses in a morning not to hold them back.

Instinct, however, is not the only factor to be considered. Environment is equally important. For instinct often remains dormant unless the incentive furnished by the environment and necessary to the development of the instinct is present. The teacher need not force nature, but she may co-operate with her by furnishing incentive to varied play. Environment given, instinct becomes a selective agent.

The teachers in the Santa Barbara kindergartens are interested in the problem of incentives. The sand-pile, common to all kindergartens, is a stimulus to an infinite variety of play. The introduction of some simple reins of red tape with bells has spread the enthusiasm for horse like wild-fire. Rubber balls were furnished freely, and were the germs of a chronic and incurable disease of ball-playing. Dolls were made accessible at recess-time, and through them a number of children found their element. A box of toys has lately been placed in the yard of one of the kindergartens, and a general rush is made for this at every recess. The train, the toy elephant, the card-board soldiers, and the wash-board are most eagerly sought after. The simple toys, however, the balls and the reins, seem to give greater and more universal pleasure and more varied incentive than the more elaborate toys, which seem to have something of a stultifying effect in their stereotyped scope and limited adaptability.

But more incentives still are needed, more swings, more ropes. The sliding down banisters and the climbing of fences suggest the furnishing of more comfortable sliding boards and trees or poles to climb. The propensity to dig with the hands and feet demands a supply of gardening tools. A seesaw made of an old board found by accident pitifully cries out with *Oliver Twist* for "more." The experiment of providing a goodly number of incentives would result in a valuable "natural selection" that would give a basis for future guidance.

REPRESENTATIVE PLAYS.

There are three groups of representative plays. The following is a grouped list of those played by the children here, classified as, Being an Animal, Making Things, and Representation of Adult Occupations.

1. Being an animal.—Based on the imitative instinct: horse, fishes, bear, frogs, cow, wild turkey, fox, rattlesnake.

2. Making things.—Based on the constructive instinct: bridges with boards, flag-poles, windmills, block-houses, houses in the sand, also in the sand fences, boats, reservoirs, gardens, pies, cakes, bread, tomares, wells, trenches, tunnels, dolls, beds, car tracks, mountains, fields with fences, barns for the wagons, car-yards, fire-engine houses.

3. Representation of adult occupations.—Based on the dramatic instinct: blacksmith, train, band, horse-show, merry-go-round, farmer, Santa Claus, baker shop, bakery wagon, dairyman, planting garden, orchard, mother, sisters, doll with variations (holding, rocking, dressing, kissing, talking to, taking to ride, taking for a walk, putting to bed, dosing with medicine, feeding with grass or lunch), washing dishes, washing clothes, ironing, sweeping, party with dishes, burial, kindergarten, school, Christmas tree, loading wagons, hauling and dumping, driving horse, lassoing horses, peddler, pantry with sand for food, hunting wild game, punishment, tomale man, bus, rainstorm with sand for rain.

The simplest representative plays are those of the imitation of some animal. As a horse the child runs and prances about, as a fish he swims in the sand, as a bear he runs and growls, as a wild turkey he flaps his arms, as a fox he hides in his hole, as a rattlesnake he writhes his body. These plays require little expansion of the imagination, but seem to be more or less directly imitative, and are entered into largely by the younger children. The animal is "played" as an isolated animal, with one or two prominent features, characteristic action first and characteristic sound somewhat secondary, and without consideration of its relations to wild or domestic life.

A second class of representative plays, requiring more imagination, includes those which are based on the constructive

instinct. Here the sand-pile in the arena supreme. The sand-pile when it is thickly peopled does not give room for much bodily action, and hand and imagination make the most of the limited individual space. The children build houses galore in the sand; they build fences, reservoirs, gardens; they pile up mountains; they dig wells, tunnels, and trenches; they erect flag-poles; they concoct pies, cakes, tamales.

Lastly comes the more complex dramatic plays, which are chiefly representations of adult occupations: blacksmith, farmer, Santa Claus, baker wagon, school, consisting chiefly of whipping the children or having recess, housekeeping with variations, horse with many variations, and so on. This tendency to imitate adult activities is brought out in a chart based on the 1200 or more cases in E. H. Russell's book on Imitation. The per cent of adult imitation in these cases ranged from nearly 80 to 95 per cent.*

About thirty-five different dramatic plays were observed. Of these certain games seem to be "chronic." The children play horse in some form every day. Certain plays have "runs," that is, they appear for a number of successive days, as baker wagon, washwoman, etc. These two plays appeared regularly every day for three weeks and with an increasing number of adherents. Dolls are played persistently, but chiefly by a certain few devotees.

In calling these plays dramatic, too much must not be implied. I call them dramatic in distinction to the other classes of more direct imitation of animals and construction of things. With children of this age these are only dramatic beginnings. There is some appreciation of relationships, an advance over the mere imitation of a single feature, but even these plays are very fragmentary. Housekeeping, for example, is not complex—perhaps it consists at one time merely of sweeping, at another of washing. Baker shop means one child with a row of sand-cakes. "Horse" consists of some red-tape reins, a horse or horses, a driver, and some indefinite running about. These dramatic games are played by individuals alone or chiefly in twos and threes, rarely in large groups. They are

*Caroline Frear: Imitation, a study based on E. H. Russell's *Child Observations*, Ped. Sem., April, 1897.

entirely organized. What co-operation there is, is merely elementary. The action involved seems to please rather more than the idea; in fact, the idea seems chiefly for the purpose of furnishing a *motif* for the action, so that these plays are largely connected with the plays of physical action. They can not be differentiated too strictly. They are a transition from the purely physical play and they are the germs of the later fever for more elaborate representation. Luther Gulick gives the age of seven to twelve as the time of such more elaborate dramatic play.*

The representative plays of this age, then, may be characterized by their fragmentary nature, that is, their selection of a few features; their simplicity, as shown in the relations of those playing; and their emphasis of the element of action.

Earl Barnes, in his study of children's drawings, notes that little children represent what they want to draw by a distorted prominence of isolated factors.** Children do not think in wholes nor in logical sequences. These facts give no justification for the complex relationships of some of the games of the kindergarten.

A very crude imagination is involved in these representative plays, yet at this age imagination is evidently in a nascent state, for it requires so little incentive to set it effervescing. A dust pan, a board, a box cover are transformed by the mind's magic into wagons. Pieces of wood, even bells, are used for babies and are taken for an airing in the above dust pan. The soul of sand is subject to infinite transmigrations, animating in turn cakes, pies, sugar, soap, soiled clothes, tomales, or rain. Grass sometimes causes the imaginary bread trundled in the baker wagon to materialize, and it further makes an excellent horse's mane when tucked under the cap—at least so little Adan thinks. A whip is easily made of a long weed. Bean-bags are used one day as loaves of bread, the next day as pillows or mattresses. A handkerchief tied over the head establishes beyond doubt a wolf. A string of black beads is, on good infantile authority, a bunch of grapes. A card-board

*L. Gulick: *Some Psychical Aspects of Muscular Exercise*, Pop. Sci. Mo., Oct. 1898.

**Earl Barnes: *A Study on Children's Drawings*, Ped. Sem., Vol. 2, P. 455.

soldier answers for a wash-board when Johann has the only little wash-board the school trustees provide.

It may be noted that the imitation and the analogies of children of this age are of the simplest kind. Their imitation is imitation of what they have seen. Their analogies are analogies of external features based on sense impression. There is no particular evidence of any appetite for symbolism. The round, black beads stand for grapes because they are round and black, analogous in form and color. No "spiritual reality" is symbolized. Susan E. Blow may ask, "For what is a symbol but a natural object, action, or event which is analogically related to some spiritual fact or process? And what is the symbolism of the kindergarten but an endeavor through the use of typical facts and poetic analogies to stir the child with faraway presentiments of his ideal nature, his spiritual relationships, and his divine destiny?"* But there is certainly nothing in the analogizing found in children's natural play to sanction the kindergartner in any strained attempts to arouse spiritual "adumbrations" in the child through the symbolic games of the orthodox kindergarten. Rather than worry about mysterious "presentiments," may it not be safer to give the child what his healthy imitative, constructive, and dramatic instincts clearly and simply demand, again trusting to Dame Instinct to utilize her material to the best advantage? The kindergarten circle *may* stir presentiments of universal unity, but in equal probability the child takes it for what it is worth to him—a toe-line whereon, forsooth, he must march.

TRADITIONAL GAMES.

The traditional games played by the children were: London bridge, pom-pom-pull-away, ring around a rosy, drop the handkerchief, draw a bucket of water, "booger" man, pussy wants a corner, tag, hide and seek, blind man's buff, goosey gander, and wood-tag.

These games, when perchance they did occur, were introduced at the suggestion of one or two older children and met with very little response among the children in general.

London Bridge was the most popular, but this was recorded only six times. As remarked at the beginning, the appearance

*Susan E. Blow: *Symbolic Education*, page 101.

of the traditional games is quite insignificant compared with the representative and physical forms of play. This fact accords with the observations of Miss Sisson* and of Luther Gulick.** Gulick places the traditional game pre-eminently in the period from seven to twelve years. The sacred circle of kindergarten paraphernalia certainly does not seem to be based on any natural penchant of children of the kindergarten age for the traditional circle games, for these seldom appear in their undirected or undictated play.

INDIVIDUAL VERSUS SOCIAL PLAY.

The kindergarten child is pre-eminently an individual rather than a social child. For a period covering four weeks record was kept with specific reference to the question whether children played alone or in groups. About 51 per cent of the plays were by individuals, about 26 per cent were by groups of two or three, and about 23 per cent were by larger groups.

In the cases observed here, there are only a few competitive group games, which have already been mentioned, such as racing or throwing the ball the farthest. The number of co-operative group games is equally small. A simulation of football played with a large rubber ball had something of a run; once seven girls built a large house together; several times single boys have driven three, four, eight, or nine horses tandem; a certain set of girls played tea-party for a number of weeks; once a youthful dairyman and ten cows entered into a mild sort of co-operation. I have included under group plays the cases where many children play the same thing and yet each individual, or each two or three, is practically independent, as, for example, when a great many drivers with one horse apiece are running around. This is not strictly group play, and, if considered apart, would reduce the real group play to about 5 per cent. It is evident, then, that the majority of the children play alone or in small groups. The larger competitive and co-operative groups appear only occasionally.

Thus, one striking characteristic of the play of these kinder-

*Genevra Sisson, *Children's Play*. Barnes' Studies in Education, V.

**L. Gulick, *op. cit.*

garten children is the individualistic nature of it. It is unorganized, non-competitive, non-cooperative. The competitive spirit arises in the period from seven to twelve and the co-operative spirit in adolescence, according to Gulick. Again, a hint may be taken from children's play, that the organized games of the kindergarten circle lay hold upon but a very feeble social instinct—an instinct whose hour comes later than the kindergarten period. The kindergarten child is an individual in his work-play as he is in his free play, and his social side must be developed through independent, spontaneous imitation, which is clearly nascent at this period, rather than through forced factorship in an organized social whole.

To sum up, the play of kindergarten children, this study would indicate, is characterized by: 1, activity—persistent, varied, moderate rather than intense, involving neither force nor skill, fairly complete in the muscular exercise afforded, and concerned *entirely* with the use of the fundamental rather than with the accessory movements; 2, nascent imagination, using idea chiefly as an excuse for action rather than action as a mere means of carrying out idea, and dealing with physical images based upon sense impressions which offer no basis for spiritual symbolism; and, 3, its individualistic nature as contrasted with the social nature of later organized, competitive, and co-operative play.

CAROLINE FREAR BURK.

Since the above was written, the generosity of friends of the kindergarten has made the addition of a number of longed-for play-incentives possible. Ground has been dug in all the kindergarten yards, and seeds and shrubs have been planted, in part by the children. There are small, but not merely "play," rakes, shovels, hoes, watering-cans, etc., which the children use in the care of the gardens. They are delighted at the horticultural prospect before them, and some beg to come

*According to a charting of E. H. Russell's cases of imitation (Caroline Frear, op. cit.) the tendency to play alone is exceeded by the tendency to play with other children at about the age of five years—the middle of the kindergarten period.

The cases of playing in large groups appear as belonging especially to the adolescent period.

in the afternoon in order to have more time to spend in gardening. Some of the plants are intended to be ornamental and beautify the surroundings, while others are more especially for the children's observation. For instance, in one kindergarten, the children have planted popcorn kernels, whose growth they will watch in all its stages until next fall, when they will "pop" the products of their labor in their own kindergarten stove.

But to speak of the more truly play-incentives. Several of the kindergartens have a number of new swings, which are kept in constant motion during the recess hours; several also have see-saws. One of these see-saws is movable—the board is movable up and down to suit its height to children of various sizes, and the whole see-saw is transportable bodily, so that it may be carried into the kindergarten room or out doors. One kindergarten boasts a sliding-board and a climbing-pole; another a turn-pole and a good-sized play wagon, in which, on excursions to the beach, little lame Maggie rides as serenely as did Cinderella in her pumpkin coach.

Two features in the Third Ward kindergarten are of especial interest. One is the pavilion. This is a large platform, forty by eighteen feet, shaded by a high roof. The sides are all open. In the center is a large sand box, twenty-one by six feet and two feet deep, partitioned in the middle. From the lengthwise edges project slabs for modeling-tables, which close down on hinges when not in use. The children dig and build and play in the sand boxes, and the sand is kept together and kept cleaner than it was in the sand-pile on the ground.

The other feature is the dolls' house. An old shed gave up without a murmur its whole front, so that, with its floor, three sides and roof, it furnishes a place where the children may "play house" and yet have all the benefits of fresh air and at the same time shelter from the wind in this less active play. Here the children have the two little rocking-chairs, the tea-table, the dishes, the washboard, the flatiron, the little brooms and the dolls, with the box used as their wardrobe. This shed presents an exceedingly busy scene at recess time. An endless amount of imaginary tea is imbibed; the floor is swept, till, whatever it is, it ought to be spotless; dolls are rocked till their

little brains either must be perpetually asleep, or eternally dizzy. Never for a day does interest flag in these miniature housekeeping arrangements.

The pavilion and the dolls' house mean extra work and care for some one, and the kindergarten supervisor is utilizing this opportunity to develop in the children a sense of responsibility and care-taking. Every day, after the second recess, the A class children remain out doors for fifteen minutes. The boys sweep the floor of the pavilion that has been scattered with sand; they clean the gardening implements in the dry sand till they shine like the watering-pots; they gather up the papers, if any, drifting about the yard, and these are burned in a little bonfire. Meanwhile the girls are washing and drying the dishes and carefully putting them away in the cotton-flannel-lined box; they see that the dolls are left clothed and in their right minds; they shake the remaining garments, fold them and lay them in the box. Thus everything is left neat and orderly for the next day's play. The children enter with a will into this care-taking process, and moral and muscular exercise go merrily along hand in hand.

C. F. B.

Development of Language.

The kindergarten covers the critical period of the ripening of the speech centers when the child most readily and rapidly acquires vocabulary. Of this we are certain beyond question. The child from two to six years learns a new language with a rapidity which utterly puts to shame the ability of an adult. The general educational principle requiring us to use an instinct in its period of nascency bids us, therefore, to put into the kindergarten the best incentives possible to excite into activity those nerve centers concerned in the function of oral expression. We do not as yet have a complete list of these incentives, but a few are submitted which practical experience assures us are serviceable:

I. STORY TELLING. But what stories? Some may be better adapted than others to excite the language centers. Child-psychology and practical experience are certainly ready to give an unequivocal answer to this question. "Mother Goose," folklore, myths, fables and fairy stories—the stories upon which the race in its childhood has mentally fattened, and which for racial ages, by the campfire, in the cave, in the wigwam, and at the mother's knee, whether in palace or cottage, the human child has ever loved to hear and repeat. From the standpoint of practical experience, the conclusion is firm that for the purpose of exercising the child in language there is nothing in power equal to these stories of free imagination—these glimpses of a world as yet unbridled by cause and effect, when man, brute, plant, and natural force gather on the green-sward of caprice to sport and play with one another without dream of quarreling. From the standpoint of educational theory, the explanation comes with equal force that in repeating these stories, the child's interest follows the path of

the race, that the brain centers which represent the older racial structures mature earlier than those which modern civilization has added, that the former constitute the trunk from which more modern tendencies bud and branch in the later adolescent period, and that these stories, moreover, are the product of a natural selection where the forces of human interest have been at work for centuries, pruning here and growing there, till what we have in these stories is the concentrated essence of what has by experience proven best to excite the language expression in childhood.

"But these stories are not spiritual; they are upon the physical plane—the grossly physical," the orthodox kindergarten exclaims in horror. But the orthodox kindergarten is merely echoing that old cry of mediæval flagellation when men mortified the flesh as evil in order to develop the spirit, and insisted upon the existence of an impassable chasm between the two. Froebel lived in the sunlight of this mediævalism, and letter study of him has reflected into the modern kindergarten some of these dying rays. The orthodox kindergarten has attempted to shelve Grimm, Anderson, Homer and Aesop, as tempters of the flesh, and has sought to substitute a repertoire of "spiritual" gems, each with its little grafted moral and æsthetic sentiment. The ethical and æsthetic sentiments contained in these "gems" generally belong more properly to the adolescent period, not to childhood. There is a time for modern ethics, and there is a time for primitive ethics, and to force the former upon children from four to six is an educational abortion, so far as moral education is concerned. At the same time a story without interest nullifies itself as a language incentive. For the purpose of language excitation—we will pass morals and æsthetics for the present—these artificial products cannot take the place of the old masters in the story-telling art, whom nature by centuries of work of selection has educated. There has, indeed, been a very hazy realization, in the kindergarten, of the place of the story as a means of language development. It has been regarded chiefly from the standpoint of morals and æsthetic sentiment, and from a standpoint in these which modern investigation condemns as untenable.

Secondly, the method of story-telling in the kindergarten needs overhauling to secure the freest environment for its expression. The circle as the place of telling the story introduces the needless factors of bashfulness and nervousness. The small group at the kindergartner's knee is a more suitable arrangement of story-teller and audience.

II. DRAMATIC REPRESENTATION OF STORIES. A second instinct which may be used as an incentive for language expression, and which shows itself in a very active form during the kindergarten years, is that of dramatic representation of stories. An essential condition for story-telling is that the child shall have, in the form of clear images in his mind, something to tell. The language structures of the brain, neurology and psychiatry are demonstrating to us, are superposed upon the more fundamental motor structures. To do a thing establishes motor structures from which the language centers are largely built. Action is an older form of language than speech, and pantomime was nature's first differentiation in the form of language. The infant comprehends and uses action and pantomime before he comprehends and uses speech. The representative games begin, it has been shown, from three to six years. The child in crude imitation is ever representing dramatically all that he sees or hears—playing horse, circus, school, policeman, etc. As a rule, indeed, children of kindergarten age use few of the traditional games, upon the principle of which so many of the orthodox kindergarten games are modeled. This class of play comes at a later period. The language curriculum, upon this suggestion of instinct, may profitably allow stories to be acted out before the child tells the story orally. But, we are told, this is just what the kindergarten has always done—symbolism is its corner-stone. We must insist in reply that there is an essential distinction between the simple imitation of some act which the child has witnessed actually, and the abstract symbolism which the Hegelianized kindergartens have attempted to force into the curriculum. It is one thing for a child to imitate washing dishes—an act which has already been impressed into her nervous system by the senses—by scrubbing with imaginary water, wiping with an imaginary cloth, hanging them upon imaginary pegs in an imaginary

closet, but it is an altogether different thing to leap from a circular chalk line to the "premonition" of spiritual nature. Symbolism calls for a class of nerve structures whose ripening time is in adolescence. Imitation of objects sensed is an activity of early childhood. Secondly, the child, to be excited to dramatize, must have as material a story which appeals to him. The folk-lore story is a necessary condition. A third condition is that the dramatization must be free and spontaneous. Froebel insisted upon this, but many of his modern disciples teach dramatization with the same cut-and-dried precision to rule that Hamlet used in his instructions to the players. The "dictation" method has arisen as a necessity of the attempt to have acted that which is beyond the child's powers of comprehension. The fact that many kindergartens feel themselves obliged to *show* the children *how to play* arises in many cases from the fact that the story employed is symbolic, and so far beyond the sense-limits, that they have no images to represent. I venture the assertion that stories of the plane of "Mother Goose," or, a little later, of the "Three Bears," will offer no such difficulty.

III. ILLUSTRATIVE DRAWINGS. A third instinct, useful as an incentive to language development, is one which, so far as I am aware, has never been utilized in the kindergarten in a measure adequate to its importance, except in a few sporadic instances. It is the child's instinct for "picture writing" as a means of language expression. Education has been, and is, burdened by a hapless confusion between drawing as an art, and drawing in a more primitive stage of its evolution, found alike in the child and in primitive man—drawing merely as a way of telling something. It is a form of language which precedes writing in the child as well as in the race. Our primary schools, and to some extent, our kindergartens, have been surfeited by drawing conceived as an art, or as a mathematical drill which we find in the use of types. But the studies of children's drawings certainly show beyond question that the drawing of children of the kindergarten age does not belong to art at all, but to language. The kindergarten child is woefully in lack of any evidences of æsthetic instinct, if we define "æsthetic" in the sense of the adult use. Intensely inter-

esting, suggestive and helpful has been the experiment of allowing the child to go to the blackboard to illustrate by means of his crude "picture writing" some story of which he is fond. Once the child has drawn the story, and thereby built it into the motor nerve areas governing the hand, he tells it by means of the speech centers with a very visible addition of power and clearness. The motor mechanisms have laid a foundation upon which the speech centers build. The psychological order of the instruction in language, by means of the story, clearly is: first, dramatic representation; secondly, drawing; thirdly, speech. Success, again, is conditioned by the character of the story. The story first must be within the child's mental horizon in order to excite him with a desire to express it in drawing.

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FREDERIC BURK.

I.

In taking up the story-work in our kindergarten this year, we decided to try with the entering class of children from four to five years old, the favorite rhymes of "Mother Goose." We took up at first the briefest ones, such as:

" Rub-a-dub, dub,
Three men in a tub."

Or:

" Jack, be nimble:
Jack, be quick;
Jack, jump over the candle-stick."

Oftentimes we acted them out before asking the children to illustrate. For instance, the morning I told them the rhyme of "Jack, be nimble," I had a candle-stick and candle, which we put on the floor; then we suited the action to the words,

each child who wished going through the jumping. "See-saw, Margery Daw," was given the first time with little success for lack of illustration, but again I tried it, erecting a miniature see-saw in the sand-box, with small dolls on either end, and, when given the charcoal and paper, the results were astonishing; each child had now a visual picture to draw from. The first verse of "Jack and Jill" was successfully illustrated in the sand-box, with a hill of sand, dolls, little tin bucket, a well at the top of the hill, with well-frame of sticks and string to pull up the bucket.

" Ding-dong bell,
Pussy's in the well,"

was enjoyed with the above well, and a picture cat to let down and pull out.

I cannot say that all the results are encouraging—far from it sometimes. Nevertheless on the child's part the illustration is always an expression of an idea. From the second illustration of the see-saw rhyme, out of twenty-three papers there were only eight which would not be recognized; two of that number were from foreigners who did not understand English.

We have our story the first hour in the morning, illustrating immediately, either with pencil, chalk, brush and paints, or charcoal. Of course, the children are not confined merely to this illustrative work, for they have every day numerous opportunities of drawing anything they wish. But at the hour set aside for the illustration of the story, they are all expected to try to draw some pictures about it. Many children need a great deal of appreciation and encouragement on the part of the teacher, often hanging back and saying, "I can't draw." Often-times when they say, for instance, in the illustration of "Hey-diddle, diddle," "That's the cow that jumped over the moon," it seems far more possible that it is a snake or a cat.

From the simpler rhymes we proceeded to the longer ones, as "Little Jack Horner," "Ding-dong Bell," "Jack and Jill," "Little Miss Muffett," "Mary Had a Little Lamb," "Little Boy Blue," and various clear verses of Mother Hubbard's dog. To one who does not fully realize the stage in ability of children at this age to draw and express a certain idea, the drawings would seem very crude and the educational value

bu small. But to the person who does understand, and who watches the power to express with the hand what has been absorbed through the eyes and ears, the development seems wonderful and intensely interesting in all its details. The greatest value of this work seems to me to be the self-expression on the part of each child. He is not doing it in the teacher's way, but it is his own creative work. The value of using these simple rhymes is that the youngest children become alive with interest, and anxious to tell them back to me with the pictures—but not in language. They do not seem to have the power or vocabulary to tell the story that has been told them, but by means of their own pictures, the impression is made which in the second year will reappear in language expression. I found that the children on entering had not an interest in long, verbose chronicles of children's doings—as I tested by sprinkling in an occasional one. Of course they often will sit and listen with apparent interest, but how much better does it seem to give them something tangible for re-telling by means of pictures or words.

It is interesting to note what especial object they will choose to draw, as in:

“ Hey, diddle, diddle,
The cat and the fiddle,
The cow jumped over the moon.”

Some choose “the cat and the fiddle”; some, “the little dog laughing,” or, “the dish running away with the spoon,” and others just the cow or moon alone. They were always allowed all liberty in choosing the part they wished to illustrate. From the “Mother Goose” rhymes I took up the simplest of the Esop fables, and those which seemed particularly attractive through the personification of the animals and their conversation. The appreciation of this type of story was clearly shown, also, in the “Story of the Three Bears,” which I had told at the very beginning of the term. At that time they seemed not to grasp its full meaning, but when tried again after the “Mother Goose” rhymes, it met with great enthusiasm. The illustrations revealed a vivid picture of the mush-

bowls, chairs and beds.

The fables which the children seemed to enjoy the most were the "Ant and the Dove," "The Goat and the Mirror," and "The Fox in the Well."

GAIL HARRISON.

II.

After the first fifteen minutes, which the children spend all together in the main room, I take my class into my room, and we have the story and its illustration. The class has been generally about twenty in number, and represents the second year in the kindergarten, the children being from five to six years old. To me this hour is the most enjoyable one of the morning, for, by means of the story, I think the teacher and children are drawn closer together. Before telling my story, I always try to draw the children out by asking for a story from them, and there is never a morning that some one has not something to tell. It may be about something they have seen or done the day before, or often it is the story that a brother, sister, or mother has told them. The children seem to feel a freedom at this time, and the diffident children can be drawn out, for I have discovered that when a child is really interested, and has something to tell, he becomes unconscious of self. One little girl that has been in my class for nearly a year, quite a diffident child in talking, has volunteered to tell three stories lately that she has heard at home, and she told them with so much enthusiasm that the children listened intently. I think we do not realize how much confidence it takes for a little child that is inclined to be diffident to tell a story to others. Several times, when a child has been absent the day before, I have asked some one to tell him the story of the previous day. Sometimes I ask one to begin the story, and let some one else finish it. During this story time there is an excellent opportunity of teaching a little lesson in self-control, for, as we all know, it is natural for the children all to want to talk at the same time, and I am particular to let only one speak at a time.

After giving the children an opportunity of talking, I tell my story, and the eagerness with which they listen and enter into it is certainly satisfying. To see the changes of expression in the faces as the story progresses is inspiring, and one cannot help but enter into it oneself.

I am convinced that the story must not be too long or too complex, for little children cannot take in too much detail. In selecting a story, I try to find a simple one, and yet one that has life in it.

I tried the "Mother Goose" rhymes with my children, but did not consider them a success, for many of the children knew them already, and they seemed to desire something with more story to it. One morning, after repeating one of the rhymes, Winfield said: "But, Miss Diehl, aren't you going to tell us a *story*?" To him this did not take the place of the story.

The illustrating of the story, which always follows, is especially interesting. In the illustrating, of course, we do not look for artistic effect, for the child simply tells the story in a crude way with the chalk, pencil, charcoal, or brush. As a rule, I have my children draw on the board, for there they have greater freedom of movement, and they draw on a larger scale. I have them draw with the broad side of the chalk, and find it very successful, for effective lines can be made without pressing so hard. Sometimes I use the brush and water colors, but I observe that they do not go into detail so much; however, I think the brush is very good for developing a soft touch. Charcoal I like very much, for it is soft, and easy to mark with, and the children do not clutch it so tightly as they do the lead pencil. They are always fond of the pencil, and some ask for it, but I think unless they can have a good, soft one, they would better use something else. I *never* give instructions in the drawing, for I want to see how much of the story the child has grasped. Sometimes I suggest, and occasionally in telling the story I will step to the board and illustrate parts as I tell it. The children always enjoy this, and always say: "Oh, don't rub it out, let us look at it when we draw." It is surprising how well they imitate in drawing. I have had them imitate my crude drawing perfectly. The development in their drawing power is marked. The draw-

ings now are very different from the crude ones they used to make at the beginning of the year. They put in more detail, and it is surprising how well they represent some parts of the story. They express in the picture what they cannot always express in words, and yet the picture inspires them to talk, for it is wonderful how much they will tell about the objects drawn. Each one seems to mean so much to the child. I try to go to each child and have him tell me the story his picture tells, and many children will tell me about the pictures, and talk quite readily, when ordinarily they seem backward in talking. As I said before, I think when a child really has something to talk about, he will talk. At first, some of the new children rather hesitate about drawing, but they soon get over this timidity. I have never had a child refuse to draw the story.

In the selection of stories, I have tried a great variety, fables, myths, fairy stories, etc. Aesop's fables I find very successful; the children tell them and illustrate them well. Of course, I make a selection from them, for some I am sure would not appeal to children of this age. Some of the favorites are: "The Ant and the Dove," "The Lion and the Mouse," "The Hare and the Tortoise," "The Snake's Eggs," "The Dog and his Shadow," "The Cat and the Birds," "The Fox in the Well," and "The Goat and the Mirror."

I have tried some of the Uncle Remus stories, and consider them a success. These stories have been put into simple language for primary grades by Miss Woods of Santa Barbara and Miss Blair of Santa Rosa. The "Tar Baby" was a favorite, and the illustrations were especially good; the fox peeking out from behind the tree was very well pictured by some. They enjoyed, too, "Bre'r Rabbit and Mr. Man's Little Girl," "Bre'r Rabbit is a Good Fisherman," and "Bre'r Rabbit, Bre'r Fox and Bre'r Buzzard," and seemed to appreciate fully the humor of the tricks played. They enjoy hearing these stories, and draw them very well, but, of course, they are harder for children to tell, and they do not tell them as readily as they do the fables.

I find that they always like stories about animals, especially when the animals are personified. I think that is a chief reason

the fables and Uncle Remus stories are popular and successful. In drawing animals, it is noticeable and very amusing to find that with few exceptions the children draw animals with the human face. However, some striking characteristic of the animal is usually evident. If it is a rabbit, for example, the long ears are put on, or if a fox, the bushy tail is there. In telling the stories where animals are brought in, I make a point to emphasize some characteristic of the animal, and I find the children usually repeat it in the drawing.

I have tried fairy stories, but am convinced that they are too long and complex for children of this age, for there is always so much detail brought out, and it is impossible to simplify them. Then, too, marriage is always brought in, and little children do not appreciate that part. The "Frog Prince" I think they liked very much, but that is one of the simpler ones. They drew this very well, I thought; the frog sitting at the table and eating seemed to impress them as being very funny, and many pictured him there, or crawling up the side of the well, with the gold ball in his mouth.

Children like to hear about mysterious little fairies that live in flowers and do such wonderful things, and some sort of fairy story might be good, for example, the "Pine Tree," for they like that, but I am quite certain that the typical fairy story does not appeal to children of this age.

Lately I have tried myths, some of the simple ones, as "The Golden Touch," "Clytie and Apollo," and "Latona and the Frogs," and the children certainly have enjoyed them very much. To-day I asked some one to tell Marjorie, who had been absent several days, the story of "Latona and the Two Frogs," and one little boy told it as perfectly as I could. The story of Clytie was illustrated wonderfully well by some; they seemed to take in that Apollo was a god, and he was pictured in his chariot in the clouds in a visionary sort of a way. Winfield pictured Apollo in the clouds as the round sun, with rays, and a smiling face within. This is so characteristic of Winfield, for his faces are typical of his own, and there is always a broad smile in evidence. The ridiculous always appeals to him, and, in drawing, usually something comical comes out. To-day, in drawing a fruit tree, he drew faces in the fruit,

much to the amusement of himself and those about him.

In giving myths, I should choose only the *short, simple* ones. I am sure the children can grasp some of them. Among other stories which I have told, there is one about a little tree that grew upon a rock. This they liked, and the moral seemed to make quite an impression upon them. Then I found one about a little wave's journey from the middle of the ocean—what it saw and what it brought to shore with it. This appealed to them, of course, because they go to the beach so often.

One day, instead of telling a story, I gave each one a piece of paper, and asked him to draw some story I had told, and I went around and guessed from the drawing what the story was. This was very interesting, and in the majority of cases I guessed the right story.

In looking at the picture books, which they have almost every day, they often find pictures which suggest some story. One day, in finding a picture of some swans and goslings on a pond, Lorena said: "That is like the story you told us, where the ugly duckling was turned into a beautiful swan." In finding pictures of animals, they often speak of some story which the pictures suggest. One day, while passing some shells, which the children have collected and brought from time to time, Lawrence found one with a little tree-like growth upon it, and he said: "That makes me think of the story of that little tree that grew upon a rock."

Pictures, as I said, suggest so much to the children, and I make a great deal of them in my class. Almost every day the scrap-books, animal book, and collection of bird pictures are passed, and the children enjoy them and find a great deal to talk about. I suggested to them collecting pictures, and that each should make a book of his own. It was surprising to find how enthusiastic they were over this. Every day pictures were brought from home, and about twice a week I let them paste them in manila paper books, which I made for each. Of course, there were pictures of all kinds, colored and uncolored, pictures cut out of magazines and papers and advertising cards. Each took a special pride in his book. Many times when a child would have two pictures of a kind, I would

see him trading with some one else. Some of the books, of course, were very much neater than others, and some were quite characteristic of the children. Winfield's was made up of ridiculous pictures—"jokes," as he called them; Richard's was a book of animals, almost entirely. In some of the little girls' books, flowers, birds, etc., were prominent.

I considered this experiment very successful in every way, and enjoyed it quite as much as the children, I think. They are constantly referring in some way to stories which a picture or something else suggests to them, and I am convinced that the story has a wonderful effect, and is one of the important features in the kindergarten. To me it certainly is one of the most interesting.

GERTRUDE M. DIEHL.

THE STORY IN A MIXED CLASS.

Coming in contact with the home life of my class of children, I found they had never received any attention in so far as education by stories or pictures is concerned, and are simply a class of happy, free, out-of-door, active beings, who would require, under the rule and confinement of an ordinary school-room, a certain amount of careful discipline. I began by having the usual "nicely prepared" story, with a good long, moral attachment. My audience consisted of about one half-interested pupil; the balance were having a good time in many ways in various parts of the room. This went on until it was tiresome all around, and I tried many changes in the kind of story. After a month I despaired, as I was neither pouring in nor getting anything out by way of representation, for no child can give expression unless he has a strong impression. At last I let the children do the story-telling to see what they were interested in at home. When I asked for stories, there was only one who responded. As he proceeded, however, several volunteered to add of their stock of information; the next day two or three became interested enough to tell me something.

These stories were mere statements of what they saw at home, or what they imagined they saw or heard. As their imagination became more weird and uncanny, I suggested it made me unhappy to hear cruel stories, and then arose a contention as to which one could tell me the happiest story.

I met the same backwardness about the drawing. Lukens says: "Language and drawing are companions." Only a few attempts were made when I called for drawings, and these were single objects, as man, boy, dog, cat, etc. The reason given was a universal one, "I can't"; never, "I don't want to." I kept up the free talks for several weeks, noting carefully all advances in the story, change of interest, increase in vocabulary, the apparent effect on both the story-teller and the listeners. They asked me to tell them a story, and from the notes I had taken I formed the basis of my talks. They always had persons and actions associated in various ways. No matter how many details were in my story, or however thrilling was the climax, there were only two or at most three objects that claimed attention, and the first was the hero or heroine of the plot, and the next was what they were doing or making.

One marked feature in this daily program was the eagerness with which one child received the experiences of another. In two weeks there was manifested more of a spirit of freedom, and of the nineteen who formed the average daily attendance only three refused because of diffidence to express themselves. From this experience I found that long stories are not interesting. Stories with too abstract ideas are to be avoided; the language and plot must be simple, full of action, and must appeal to the real, every-day life of the child. I had now reached the stage in my acquaintance where I knew, partially, at least, what children could and would receive from me, and the next step was to find what they would give back to me, and how they preferred to do it. Drawing was certainly very popular after the children found I was satisfied with their crude efforts. At first I suggested single objects, and by questioning them as to their knowledge of any given subject, which was always a very familiar one, I found there was a readiness to respond, on paper, or at the board. I found that talking earnestly about any object acted as a great stimulus. "From the heart the

mouth speaketh," so when the children are brimful of interest they must express it.

There seem to be three stages in the development of drawing power; first, the period in which movements are wholly muscular, and are guided by visual centers. This may be called the scribble period of drawing and is similar to the babble period of talking, or the kicking period preceding walking. It is the time reaching up to the kindergarten age. The second stage, from three to nine years, marks a change from the scribble to crude representation and gradual interest in detail. The visual centers show evidences of extreme instability to control the delicate muscles of the arm, hand and fingers, which must be presumed to be coming into functional existence at this time. This includes the kindergarten period, and, observing this "physiological inaccuracy," I give the children plenty of scope to exercise the larger muscles, the arm movements at the board, or with soft, black, sketching crayon and large pieces of paper. Even crowding the space at the board tends to produce cramped work, and I draw off spaces, placing the names at the top, so I may call upon each one to report upon his drawing, and there is no infringement of territorial rights. The third stage, which is the motive or interest period in which the child does not depend entirely on his mental idea, but tries to draw from objects, may be beyond my work, but if this second period receives its share of attention, and the child's mental development goes on healthfully with proper stimuli, he is ready for the advance in execution so soon as his mental powers require it.

Not to confuse their mental images, I show the children very simple pictures, both colored and black and white. Interest for the time being seems to lean more to the colored, but reproduction is not any better if quite so good. The outline pictures are most readily imitated. I made a test of "Mother Goose" rhymes as an incentive to expression. The children are not natural actors in any sense, but the action expressed in many of the jingles caused several to want to dramatize the rhymes, and next to draw them on the board. The child feels most the thing he tries to impersonate, and loves best that which shows the most of himself. This I observe in all of their work and play. What is really their own creation, whether

it be an idea or a toy, is most readily appreciated. This is why Millicent Shinn and others discovered that children prefer to represent their own ideas rather than objects as they really exist.

A great many old magazines and picture-books are freely used, with the privilege of selecting what the children desire for scrap books. The pictures are cut out and pasted according to the children's own ideas. Occasionally one will refer to me to know whether I would cut it a certain way or suggest another. Looking at pictures becomes consequently more of a business than it was when I merely placed the books in their hands to look at. Every child has a choice, and these choices are afterwards drawn on the board or paper, not as an imitation, but from a mental image. I have lined the walls with standard pictures, mostly in black and white copies, from the works of the best artists, and I have found that only so much appeals to the childish mind as has become a part of individual experience. Pictures with too many facts portrayed do not reach them at all, and they seem relieved to find, in the heterogeneous mass, a stray dog, cow or cat upon which to rest.

In an experiment with models I gave the casts of a cat and a dog, and received exactly the same kind of picture as was drawn without the model; this was also true after I had taken two live, active dogs into the kindergarten for several days and had them for playmates.

One secret of success I am sure rests in being able to accept whatever the children do and in cherishing it as an expression of an honest effort, notwithstanding the many temptations to read into their work something that is not there.

I frequently ask them to reproduce some object with chalk or pencil that has been formed with the blocks, sticks, clay or other material.

To avoid weariness of drawing I try to change the order; one day our paper will be folded in the form of a book or frame of some novel shape, or I change to colored pencils or brushes, and the drawing period is not over ten minutes with privilege of returning to their seats if they choose.

Rulers and a great variety of geometric forms in blocks of all sizes are placed where they can have them to play with

every day, but no attempt has ever been made to draw or form conventional figures. One little boy chanced to cut a beauty form with scissors, but no persuasion could get him to name it until he made another attempt and cut two pieces resembling feet, then he quickly called it a baby.

From the single-object drawing, the class of their own free choice has advanced in three months to group-drawings. No criticism as to number of objects, kind or accuracy has ever been made. I have asked that so much of the story as could be remembered be drawn, and in a few instances complimented one or two who produced extra large ones. The spirit of competition is quite marked in some instances, and a hint to one reacts on many. The most backward boy I had in the beginning, one who could neither draw nor tell a story, has developed a remarkable taste for drawing, and has gone so far in detail as to add roots, branches and fruit to his trees, and aprons to his little girls.

Discipline is one of the advantages in drawing. I owe to music and drawing a large share of the "subduing tendency" in harmonizing physical actions of my band, so unruly at the beginning of the year. This was accomplished through the attention and quiet required during these two short periods.

MAY REESE.

CLAY MODELING.

With our work in clay modeling this year, we have followed the plan of drawing from the child self-expression and individuality rather than to give him any definite training in form-study or work from models.

The work heretofore had seemed very mechanical and of but little value to the child. Many kindergartens have the children model cubes, cylinders, tomatoes, leaves on plaques, etc., endeavoring to have them do artistic and finished work, but to me it seems that the clay should be used more spontaneously, and represent individuality and the creative work of the child.

We had the clay modeling almost every day at the beginning

of the term, and later three times a week regularly, besides the times when the children chose it of their own free will. It was always kept in a soft, ready condition, and plenty of it on hand, but, strange to say, if left to themselves, the children all made diminutive objects, breaking their piece of clay up into small pieces.

They did not seem equal to moulding objects on a large scale, and rarely have I seen them mould an object from a whole piece, usually making the ears, legs, tails, etc., and attaching to a main body.

The time allowed for the use of the clay was from fifteen to twenty minutes. A longer time seemed to lead to careless work on the part of many children. Some days they would all be asked to mould the same thing, and then, again, each child could mould the object which he pleased. Individuality of interests is very strongly brought out in this class of work. In a class of twenty-five children there have often been twenty different objects made by as many children. Perhaps children side by side will each make four or five different things, each one working out his own ideas regardless of the others, and again imitation will play a great role, inspiring many children, lacking in originality, to try and produce something like that of his neighbor. The value of imitation and wise suggestions is very important, and much may be done by the teacher in an incidental way.

It is a remarkable fact that almost every child seems to work for one or more characteristics, or striking features, in the making of animals. They are content if in making a rabbit the ears are tall and stand up straight, even though the body may be long and angular. One child made a cow with good head and horns, but no legs; another a cat with type ears and four feet, but much too heavy tail; a rat, with a grotesque body, but long, slim tail, seemed satisfactory. The instances are innumerable where the child seems satisfied with such work, in fact, the average child prefers to make many cruder objects with one or more type features, than to make one object with accuracy and finish of detail. There are exceptional cases where a child will work with wonderful finish and proportion of parts, but such a child seems something of a prodigy.

Most of the children, whether four or five, seem to go through a marble and ball making stage—these being the first objects generally attempted. It is followed by the making of animals, birds' nests and eggs, papa's pipe, cigar, wagons, chairs, spools, etc.

Strange to say, they never modeled any dishes until I placed a toy tea set on the table, but only a few plates, sugar-bowls and teapots were made.

The making of the human figure does not appear first, as in the drawing, except in exceptional cases. Babies, with ball heads and rolls of clay for legs, appear in cradles, but are not made extensively. As in drawing, the work is very crude, but it has the great value of being original and offering an insight into the child's mind. He will often stumble upon something remarkable by accidentally moulding a shape and recognizing its likeness to a familiar object.

Children of the kindergarten age do not enjoy working from a set model. Its individual characteristics are not important to them. A type apple is the same to them as a particular one. and I have found after many experiments, both ways, that they represent an object from memory with more readiness and satisfaction than if asked to make one just like the teacher's model.

Stories that have been told are often illustrated spontaneously with the clay. "Rub-a-dub, dub, three men in a tub," was very suggestive, and many clay boats and tubs were made with three and five or more men in them. After repeating the rhyme of "Jack, be nimble," I suggested we all try making candlesticks and candles. Great individuality was shown, and all made the kind they knew. Some were regular tall, brass ones, like those seen in churches, and others had saucers and handles in various shapes.

GAIL HARRISON.

Music.

The instinct for musical appreciation and expression develops very early, and is in a highly sensitive and teachable state during the kindergarten period. Infants in the first year of life frequently imitate the musical cadences of a conversation to a perfection that is surprising. Many can carry a tune in the second year. In brain softening of the language centers, known as aphasia, it is the musical cadence of speech which is lost last, as it is the first gained in speech acquirement. Gilbert has shown that at six years the child is able to detect intervals far more delicate than any of the requirements of ordinary music demand. Lancaster, from the biographies of one hundred famous musicians, has shown that the average age at which they have shown striking evidence of ability is under ten years. What is the function of music in the Kindergarten?

Dr. C. C. Van Liew, in a review of the conclusions of recent studies of children's preferences in music, shows that their instinctive likings fall into a few well-marked groups of which the more important are martial or patriotic selections, religious selections, and music of the tender emotions which center about the home. Studies in the music of primitive peoples and among animals show that these groupings, which children prefer, extend in tapering tongues far backward in human civilization and finally show their roots originating in the mating, fighting, and fearing instincts of lower animals. Through racial ages music has been linked with certain emotions, primarily those of love, patriotism, awe and religious worship. Upon the psychological principle that states long associated together become incentives by which one arouses the other, the function of music in the early periods of life is coming to be regarded,

not as an art, but as something more fundamental—an incentive by which to excite in the child the latent racial emotions, love of home, country and God. Music, in this primitive stage, belongs not to art, but to morals. Further, in its immediate origin, we know music has been most intimately associated with the rhythmic dance. Music in the kindergarten must be upon the simpler, more primitive plane, accompanied by movements and appealing by strong accentuation to the patriotic, religious and home sentiments. We have heretofore been attempting too much in the kindergarten to graft upon early childhood an appreciation of the more subtly æsthetic phases of music as an art. Music as an art has a later place in the child's education.

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FREDERIC BURK.

THE METHOD OF MUSIC INSTRUCTION.

In the second week of October, music was introduced into the city schools and kindergartens. Since that time teachers' meetings have been held for the discussion of methods and plans of carrying on the work with the little ones, and lessons have been given to the teachers in tone and singing, and suggestions made in regard to the use of the piano.

The steps taken in music in the kindergartens have been suggested by the action of the children themselves, and not by any preconceived ideas of the supervisor of music or of the teachers. Many songs and games have been presented to the children which were not continued because of lack of interest and because they have never been asked for by the children; therefore they will not be discussed in this paper. There has been no attempt to teach music, but simply to give the proper environment for stimulating a desire to hear and to sing. We have worked on the idea that children should hear a great deal of music before they are expected to render any, and the results have been most encouraging. Besides listening intently to what is played or sung for them, the children manifest a desire to enter into the music with a whole-heartedness that is surprising, and which meets our most sanguine expectations.

To lead the children to listen to music, they were at first allowed to stand in any position, and after their interested attention was secured for an instant, they were told they would be allowed to do anything they chose—run, clap hands, march, sit, go to sleep, sing, play, dance, rock dolls, play horse, or do anything the music told them to do. At first they generally followed a leader, self appointed, but after several times doing what they did not exactly think the music told them to do, many became independent and marked their own rhythm and interpreted to suit their own fancies. For instance, the teacher at the piano played selections from "Marching through Georgia," "Home, Sweet Home," "Coming Through the Rye," "Traumerei," "Anvil Chorus," and the like, varying the program from day to day. These were never announced nor explained. The children were left free to do what they wished, and from the first they showed much interest in listening and "finding a story" for themselves.

This work should not be mistaken for the work that has been carried on for years in the kindergarten, where stories are told of musical compositions, such as the Wagner operas, a Mozart sonata, or the Moonlight sonata, and then the children are directed to "listen to the piano tell the same story," while the pianist plays the composition she has already inter-

preted, with the hope of showing the poor, little things the spiritual meaning of Lohengrin.

With us there is no suggestion of the meaning, in story or otherwise—no “logical sequence” leading up to the piano playing. The children are simply led to express, in their own way, the emotion that the music suggests, and when they do so by clapping hands, running, or quietly listening, no comment whatever is made in regard to the right or wrong interpretation.

A great deal of attention has been given to physical rhythm, going through the steps the race has taken to develop music, except in a much less crude manner. We dance, clap hands and use all sorts of motions to songs, not for the sake of teaching gesture, nor to give meaning to the words, but to have the child feel the rhythm. The following have been the most popular songs for this purpose, and are given in the order they were used:

1. “Did You Ever See a Lassie.”
2. “Children Go, To and Fro.”
3. “The Young Musician.”
4. “Jack Horner” and other “Mother Goose” melodies.
5. “Looby Loo.”
6. “The Country Dance.”
7. “Anvil Chorus.”

Of the songs without physical action, the following is decidedly the most popular:

“Once I got into a boat,
Such a pretty, pretty boat,
Just as the day was dawning;
And I took a little oar,
And I pushed away from shore,
So very, very early in the morning.”

The children have drawn it, represented it in clay, insisting upon its being “not a boat, but ‘Once I got into a boat’”; have dramatized it, and never failed to ask for it when given an opportunity to choose.

Kindergartners usually present the words, with explanation, first, and for several days play the tune on the piano before putting words and tune together. We present the song in its entirety, with action and without explanation. For instance, the teacher sits at the table with the pupils, and, without any story or remarks, sings an entire verse of:

“O, the blacksmith’s a fine, sturdy fellow;
Hard his hand, but his heart’s true and mellow.”

At the same time she strikes the table with fist, and, keeping the rhythm, “plays blacksmith.” The children never fail to catch the impulse, and upon repetition of the verse need no urging to sing. Although they do not get the words right, and, in fact, do not understand the meaning of them except to get a general idea of the story, they accept the song if it is vigorous and rhythmical.

Small children sing very difficult intervals if the swing of the song pleases, and there is no doubt that the success of their musical training depends upon the power of the teacher, and if the kindergartners were trained to know music, as they are to know many less useful things in the professional schools, they could give the child an impulse that would be lifelong, for certainly he sings as naturally as he talks. All that is needed is proper guiding to develop what is too often killed by improper teaching.

Besides the work described, we sing “Good Morning” songs, prayers, games, songs of trades, nature songs, “Good Byes,” in fact, songs for all times and places. The teachers all sing and yet the children are made to feel that they are expected to sing alone, and do often carry choruses alone.

As a test of their power to recognize the music that is played and sung for and by them, the supervisor often plays a program of twenty or more selections. The first week in May the following test was given. The supervisor of music upon her weekly visit to each kindergarten said:

“Now, children, you may do whatever the piano tells you to do,” and played the following: “Cold Water Song,” march from “Figaro,” “Home, Sweet Home,” “Young Musician,”

"Lohengrin," "Little Bo Peep," "Looby Loo," "Jolly Old St. Nicholas," "Once I Got into a Boat," "Good Bye to You," "Did You Ever See a Lassie," "Lucia de Lammermoor" march, "Country Dance," "Sleep, Baby, Sleep," "Children Go, To and Fro," "Dance of the Brownies," "Shine Out, O Blessed Star," "Lips Say Good Morning," "Anvil Chorus." During the recital, which was not so long as the program would indicate, because only snatches from these compositions were played, most of the pupils sang or marked time with some motion, which had accompanied the first rendition, or by some action of their own, showed they recognized and were able to recall the entire program. It certainly was interesting to see them listen just an instant at the change of tune, and then take the motion or step to some song they had not heard for months or weeks. And, although to a casual observer our work may seem fragmentary and purposeless, because it is not carried out on the logical plan, we are sure of the fact that the children like to sing, and in everything they do, whether drawing, clay modeling, playing with blocks, rocking dolls, sand work, or looking at pictures, they are constantly reminded of some song, and the desire to sing is manifest in their action.

The work that has been carried on throughout the entire school system has made it an easy matter to get the child to express himself. The very atmosphere has been impregnated with self-helpfulness.

The daily program includes at least ten songs, and more often fifteen, besides the piano playing, in order something like this: March, "Good Morning," prayer, free choice, when several songs are sung, singing at tables, piano playing for rest, cultivation of ear, singing during free play, lesson in rhythm, songs and "Good Byes."

Of course, there has been individual work with those who do not sing in class. On account of the close relationship of the kindergartners and the home, we learned that many of the children sing at home and teach the songs to their little brothers and sisters, and we believe the reason for their silence in class is timidity or inability to respond to the same rhythm, and when they seem indifferent they are perhaps taking in more than they would if urged to sing. With proper encour-

agement they come into class in time. The "monotones" receive more help, and the ear is trained with piano and voice. While they are encouraged, they are not told they are right except when they are. Kindergartners have done much harm in allowing monotones to pass through the kindergartens, believing they were singing. We take the tone they give, and work up and down from that, and we have a plan for encouraging all the children to make tunes of their own, which gives the "monotones" an opportunity to express themselves. It has not been tried long enough to determine whether this will prove helpful or otherwise.

Pianos are all tuned to the international pitch, and are used for the exercises in rhythm and for training the ear to various tunes. Nothing but good music is played, but never an entire composition. The motif is played distinctly and changed often, that is, at one sitting the teacher plays several snatches of good compositions.

Thus, while we are trying to hold the interested attention of the little ones, we are in no way forcing the attention, but are aiming to satisfy the musical instinct, and keep in mind that the emotions develop before the higher intellectual powers, and it naturally follows that exercise of these emotions goes before the more abstract lessons.

JULIET POWELL RICE,
Supervisor of Music.

Children's Spontaneous Choice and Use of Kindergarten Materials.

The kindergarten is loaded down with an unsifted mass of material which has been chosen by the adult mind as suitable for the logical development of the child and which has been used as the basis of dictation exercises, arranged in formal sequence. The child has not been particularly consulted either in the choice of material, or in the use to be made of it, and just what the natural reaction toward these materials, or their use, is, on the part of the well-behaved, docile little puppets who furnish the background in the drama of the gifts and occupations, is hard to determine. The Santa Barbara kindergartens were anxious to discover the spontaneous reaction of the children toward the traditional kindergarten materials, and for this purpose a test was made, of sufficient educational value in itself, however, it was thought, to redeem it from the purely experimental plane.

The test was as follows: Every day for half an hour the kindergarten materials, the gifts and occupations, were spread on a table and each child chose what one thing he cared to play with for that time. At first the idea was carried out in the form of a play; the table and its contents were supposed to be a store, and the children came, and, using the tablets or parquetry circles for money, bought what they wanted, so that that half hour of the day came to be known as "store time," a name which clung to it long after the "store" idea was reduced simply to the less romantic "free-choice time." Each child took his material to his seat, as a rule, and there did what he pleased with it. The following materials were used: Beads (spheres, cubes and cylinders of various colors), with strings, blocks, clay, first-gift balls, second-gift cubes, spheres and cylinders, lentils, parquetry, folding paper, pencil and paper,

rings, scissors and paper, sewing cards, slats, sticks, tablets and tile boards. The sewing cards were ready perforated with holes, *large* and *far apart* (on the average a half inch), representing animals, fruit, designs, etc.

The test covered a period of two months, and was carried on in the four kindergartens. The first month was allowed as a preliminary step, during which time the children were becoming accustomed to the novelty of the idea, and the kindergartners were experimenting on the best way of giving out the material and of keeping a record of the choices made. At the beginning of the second month all was ready for a systematic, uniform method of procedure. The children had settled down and accepted the performance in a matter-of-fact way. They were by this time quite familiar with all the materials, so that mere novelty of any special material could not influence choice. From a study of the various notes made by the kindergartners during the first month it was decided just what sort of uniform record should be kept. Squares were blocked out on a large sheet of paper; the names of the children were written in a vertical column on the left; the record of each child was kept in a horizontal column to the right, each square representing a day, as follows:

	Mon. Apr. 17	Tues. Apr. 18.	Wed. Apr. 19.	Thurs. Apr. 20.	Fri. Apr. 21.
Minnie	Beads. Classified by color.	Clay. Represented a man.	Clay. Represented a boat.	Scissors and paper. Made doll's handkerchief fringed.	Scissors and paper. Made designs.
Adolph	Sewing card.	Blocks. Made a barn.	Beads. No order.	Clay. Made mouse.	Parquetry. Design.

Thus running the eye across the page one could see the whole number of choices made in succession by each child during the month; looking down the page, one could see the choices made by all the children on any particular day. In each square were written: first, what material the child chose; second, what he did with that material. In this way it was sought to discover what materials appealed most largely to the children and what was their spontaneous use of the various materials. The kindergartners were careful to have each

child's choice as independent as possible. To avoid the danger of suggestion some of them even had each child, after he had looked over the table, whisper what he wanted, and then when all had chosen distributed the material. The records of the B and A classes were kept separate in order to note differences between the first and second-year children; the records in the four wards were also worked over separately to note the influence of different environment, and later were combined for the purpose of seeing what interests persisted in spite of environment and remained fundamental. Now as to the results of the test.

CHOICE OF MATERIAL.

The whole number of choices made in the four kindergartens was 1755, of which 804 were in the A classes, that is, the second-year children from five to six years of age, and 951 were in the B classes, composed of the first-year children from four to five years of age.

A study of the records of the four kindergartens shows great uniformity in the results, with but a few exceptions, which we should naturally expect, due, perhaps, to some previous training, or some influence causing a run of a certain thing in a certain kindergarten. It is supposable that kindergartens may have fads as well as other bodies of people, and the "psychology of the crowd" may begin as far down as the kindergarten. For example, in one kindergarten blocks were unusually popular, owing to an intense interest developed in them previous to the "store" experiment, an interest which was due to the remarkable blocks themselves, elegant, huge blocks, as they were, straight from the planing mill. Beads, so popular in the three other kindergartens, were hardly chosen at all in this one. The children had formerly used the beads as blocks to build with, instead of for stringing, and when some larger play blocks, and then the huge planing-mill blocks, were introduced in turn, the charm of the beads vanished. Another striking exception was in the B class of the third ward. Clay, so universally enjoyed, was here hardly touched, while the first gift ball, which was of less interest in the other wards, was overwhelmingly popular in this ward. This is explained by the fact

that this particular class consists of very immature Spanish children, who are hardly beyond the stage of physical play, and might really be called a C class.

Beyond these two striking exceptions, easily explained by the local conditions, there are only minor variations in the different kindergartens. The emphatic feature in the records is the uniformity, leaving us to believe that the results show the workings of fundamental, universal interest, rather than the effect of local environment. By uniting the four records, too, we eliminate local variations and strike a safe average. The table and chart given below show the combined result of all the choices, and the proportion of the children in both classes choosing the various materials. The lower black lines represent the second-year children, or the A class; the dotted lines represent the first-year children, or the B class.

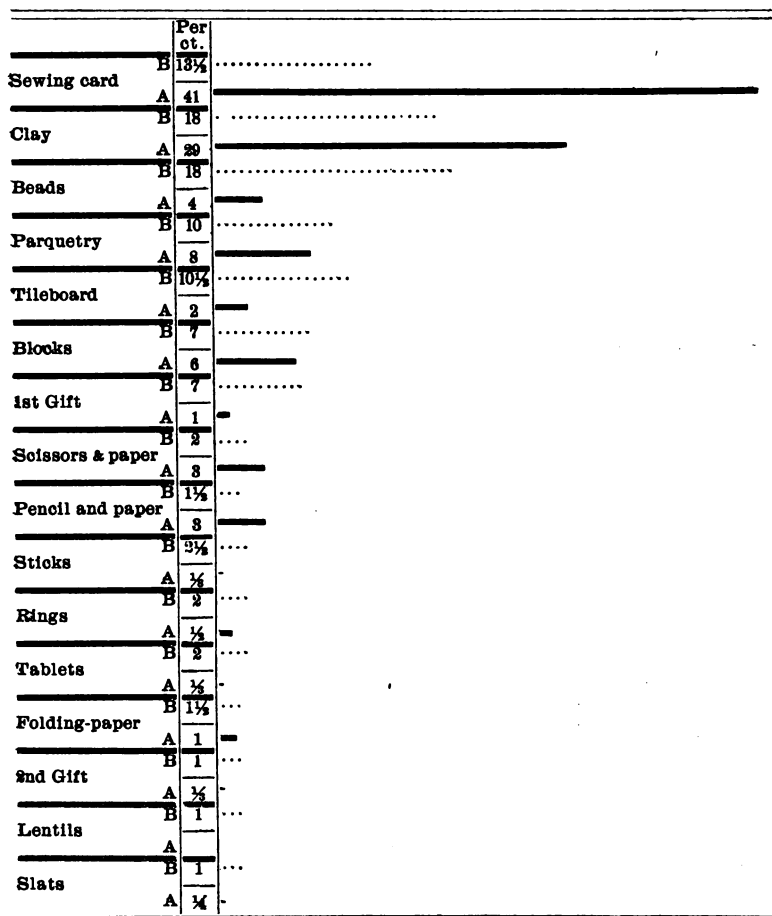
From Chart I it will be seen: 1, that certain materials are very little chosen—the second gift blocks separate from the general mixed play blocks, the lentils, the rings, the sticks, the tablets, the slats, the folding paper. The pencil and paper, too, are not much chosen, being outweighed by the larger, freer drawing on the board at another time of the day; 2, that certain materials are moderately popular, as beads and parquetry, the tile board and the blocks; and 3, that the two materials far outstripping the rest in interest are clay and the sewing-card.

The folding-paper and the lentils were never chosen more than once by an A class child, or twice by a B class child. Slat were selected not more than two times by any child. This was true also of the tablets and the rings. In the A class no child ever chose the tile board, the beads, or the sticks more than twice. The handling of such material one or two times was sufficient to prove its limited capabilities. On the other hand, clay was often chosen five, six or seven, even eleven, times by the same child. The average number of times that it was chosen by those selecting it at all was 4.7 times. The sewing-card was in some instances taken fifteen and sixteen times, the average number being five times.

We may notice a few points of difference in the choices of the first and second-year children. To the first-year chil-

children the materials possess greater novelty. Their choice is consequently more scattered. Their interests are less differentiated, less narrowed down, more general. They are in the experimental stage where they want to try everything and find its value, or where, not knowing so well the capabilities of any certain object, they are attracted by some

Chart I, Showing Choice of Materials.



pleasing external feature, and they choose not knowing what they are going to do with the object. No one choice stands out so prominently. Beads represent the largest choice of the B classes, though only 19%, followed closely by clay, 18%; then the sewing-card, 13½%; the tile board, 10½%; parquetry, 10%; the first gift, 7%; and blocks, 7%. The second-year children, on the contrary, with more experience behind them, narrow their choice largely down to two or three definite lines. The sewing-card and clay are most strikingly prominent, occupying 70% of all the choices, and followed much more modestly by parquetry to the extent of only 8%.

Of the seven materials, then, which show any prominence in either the A or B classes—beads, clay, the sewing-card, the tile board, parquetry, blocks and the first gift—we see that the second-year children lead the first in clay and the sewing-card, and the first-year children lead the second in beads, the tile board and the first-gift strongly, and in parquetry and blocks very slightly, the second-year children, indeed, showing almost no interest in the tileboard or the first gift. Clay and the sewing-card, then, are the two things especially which keep up a permanent and growing interest into the second year. Of minor choices the second-year children lead the first in pencil and paper and scissors and paper. What may be done in developing more interest in these materials is awaiting the result of experience.

The fact that such differences do appear in the children of the different years of the kindergarten shows at least that the kindergarten child is not at a standstill; that he is in the process of development in both interests and ability. There seem to be certain clearly marked stages in both his interests and his method of attack. Let me suggest these in a general way, basing my conclusions not only on the mass results of figures, but on general observations of individual children in the kindergarten. The child's interest at first lies in physical activity, in muscular pleasure. He does not like to sit at a table and pretend to be doing something with something—a stupid occupation for an active child. As we saw in the B class of the third ward kindergarten, the little Span-

ish children, representing the greatest immaturity, love of all things to play with the balls. They take them out into the large room and run around gaily and throw and roll the balls. This natural desire for physical activity is too often curbed in the kindergarten, and the entering children are too often prematurely forced into being little models. The kindergarten is turned into a school rather than a child-garden.

When the child does make his first attack on the material, whatever it is, it is in the line of aimless handling. He does not do anything with the material, he does not know what he wants to do with it, or what can be done with it. But he is interested to handle, to touch, to feel, and if the object is something soft or pretty and bright colored, so much the better. He likes to handle the soft, warm, colored ball, or he likes to finger with the tileboard or the lentils. When gradually he settles down really to "do something with something," he first combines muscular pleasure with the rudiments of construction. He is interested in the doing rather than in the result to be attained. Now, instead of handling aimlessly or indulging in mere physical exercise, he is interested in the accomplishing (not the accomplishment) of something. This something must be very simple, or it may, indeed, hardly amount to anything at all. The child likes now, instead of merely fingering the beads, to string them into a necklace, and he strings and strings and strings, and his soul seems to find satisfaction in mere stringing; or, perchance, it finds satisfaction, when he deals in parquetry, in mere sticking, or, when he is concerned with the tileboard, in mere pegging. But string and stick and peg he must—in lieu of anything better. Meanwhile along with this doing, he enjoys pleasant sensations of color in the variegated beads and pegs and parquetry, and rudimentary art-feeling is—let us trust—stirred.

But soon the child passes from the stage of mere doing into a rapidly developing constructive stage, where the constructive instinct blossoms as under an April shower, and advances from baldest simplicity to ever-growing complexity. In this stage clay and blocks furnish capable material. Along with the constructive instinct the art instinct puts

forth a few more feeble shoots and parquetry-work begins to show more evidences of design, of symmetrical arrangement, than at first. With the feeling of beauty, too, grows its counterpart, the feeling of use and permanency, and the sewing-card attains great value in the childish eyes. A glance at the table will show that with the first-year children clay exceeded the sewing-card; and with the second-year children the sewing-card, combining beauty, use and permanency, exceeded clay. The younger children, too, in most of their choices are influenced by the momentary pleasure of the handling, or the playing, or the doing. Then this material is cast aside and the next day they have forgotten what they did the day before. With the older children the definitely constructive interest is far stronger, and also the love of beauty and permanency. One of the chief charms of the sewing-card seems to be that, once done, it is "something pretty," as the children here always call it, something that is more satisfactory to their dawning self-consciousness than their own crude attempts at outline, and, moreover, something permanent. The younger children, as I have already suggested, handle and experiment with the slats, tablets, sticks, rings, lentils, folding-paper, etc. The novelty or the bright color, or some external feature attracts them. But soon the choice becomes based, not on the superficial attractions of the material itself, but on what *use* that material can be put to. *Use, then, with the older children, supercedes external attractiveness* as a basis of choice. Clay, for example, is not so pleasing to the eye as the gay beads or the festive tileboard, but it can be used more variously, can be made into an infinite number of forms.

The question of *use* brings us to the second part of the study, as based on the records.

USE OF MATERIAL.

The spontaneous use of the materials was recorded under the following heads: No Order, or Aimless; Form Arrangement; Color Arrangement; Design; Representation. The results may be seen in Chart II which follows. The

sewing-card, which furnishes the child with a picture or design already marked out, and so does not represent spontaneous arrangement on his part, is omitted in this consideration, and only the spontaneous uses of the other materials are represented in the percentages.

The amount of aimless play with the first-year children is great, 36 per cent, while this decreases to 18 per cent with the second-year children. Of the purposeful play, with both classes, *representation* leads; then follows color arrangement, in which the first-year children are slightly more interested than the second-year children; design takes a third place, and is more prominent with the second-year children. Form arrangement, as, for example, the alternation of a regular number of cube beads with a regular number of ball beads, or some such combination, is decidedly insignificant in both classes. It is evident, then, that the kindergarten child's spontaneous self-activity and interest are toward natural and life forms rather than toward forms of beauty and geometric design, although, clearly, there are some traces of the art-instinct in this latter line. The cruder form of the art-instinct, as seen in mere color arrangement, is somewhat more manifest. Interest in concrete representation far outweighs interest in abstract form and design arrangement. The child prefers to imitate from memory, with delightful freedom, rather than confine himself to the narrow restraint of symmetrical proportions.

What distribution of use do we find among the different materials? The aimless play is largely with the beads, the parquetry and the tileboard in both A and B classes. There is almost no aimless play with clay or blocks. Color arrangement pertains largely to the beads, parquetry and tileboard; with the B class almost entirely to the beads, while with the A class more to the parquetry, united at the same time with design. Design is found almost exclusively with the parquetry, and to some slight extent with the paper and scissors. Clay and blocks are practically devoted wholly to representation; and the spirit of representation crops out also in some degree in the use of the tileboard, as far as its limited capability will permit, and of the paper and scissors.

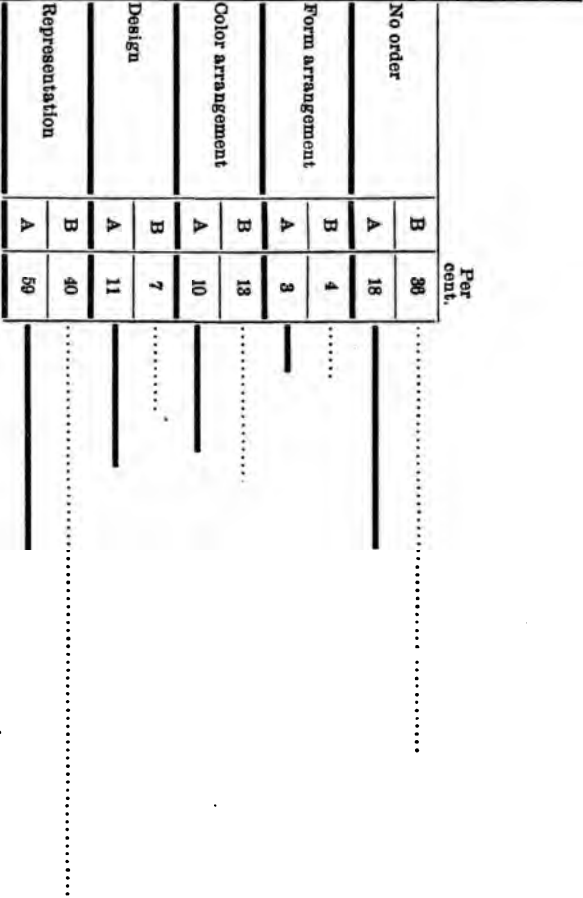


Chart II, Showing Spontaneous Use of Materials.

The use, then, to which the material can be put, we now see more clearly, determines choice. Much of the undirected play of the first-year children is aimless—nearly half of their bead play, over half of their parquetry play, four-fifths of their tile-board play, and nearly all of their play with the minor materials are aimless—so that the younger children are not concerned as to what they can do with their material, but choose according to the glittering attractions of the various materials themselves. Hence they dabble in a greater variety. The second-year children choose material far more largely for what they can do with it, as only 18 per cent of their work is aimless. Now what material, of all those which are open to spontaneous exercise on the part of the children, is most susceptible to handling, most plastic, most capable of assuming a great variety of forms, most tempting to the constructive instinct? *Clay*. Clay is infinitely more pliable, more adaptable than blocks. With blocks only houses, trains, etc., can be made, but with clay, everything under the sun. Clay, too, has its advantages over pencil and paper, or paper and scissors, for its representations are not flat, but are realistic, of three proportions. So much for clay from the standpoint of the child's interest. The superiority of clay work in giving exercise and plasticity to the hand and fingers, with no possibility of the pencil-cramp should give it an important place in the kindergarten curriculum from the standpoint of physical development, if nothing else.

A few sex differences may be noticed. These are not striking. The kindergarten boy and girl are not differentiated to any great extent. Looking at the more popular materials, we find that about the same proportion of boys and girls choose parquetry, the girls exceeding the boys somewhat in the B classes; that the girls lead the boys decidedly in choice of the sewing-card, though the boys show a very strong interest in the sewing-card, and also they lead with the beads, the boys having but small interest in these; while in the use of the clay and blocks the boys exceed the girls, though the interest is very strong with the girls. Shall we say that the girls are more interested in pretty effects, as shown in the sewing-card, and that they are less original, spontaneous, initiative, while the boys are more independent, more actively constructive? We

find at least only the germs of these differences in the kindergarten.

REPRESENTATION.

To find the trend of the children's interest in the line of representation, the following chart (III) was made, showing what was represented, whether the human form, animal forms, things, or story-illustration.

In both classes the representation of objects exceeds that of the human form or of animals. This is due largely to the fact that clay is the chief material used, and ease of representation plays an important part. With the pencil the human form predominates, as all studies on children's drawings likewise show. But the interesting revelation in these representations lies in the great variety of forms with which these young artists are familiar. The first-year children represented eleven different kinds of animals—rabbits, dogs, chickens, fish, birds, turtles, cats, bears, bugs, pigeons and horses. The second-year children represented all these and added monkeys, ducks, donkeys, foxes, parrots, pigs, snakes, mice, butterflies, elephants, making twenty-one different kinds. The first-year children represented eighty different kinds of objects; the second-year children over ninety different kinds. The following are a list of the objects represented by the children, and give some index to the range of their thought: Santa Barbara Mission, houses, churches, castles, towers, Spanish houses, chicken-coops, barns, windmills, boats, sailboats, bridges, tunnels, reservoirs, water-tanks, car-lines, electric cars, trains, engines, yards, corrals, gardens, fences, gates, wagons, buggies, wagon wheels, dump-carts, rafts; of objects about the home—chairs, rocking-chairs, high-chairs, tables, stools, couches, sofas, windows, picture frames, pictures, beds, cradles, baby buggies, bath-tubs, stoves, pails, dishes, bottles, glasses, pans, flatirons, bells, oil-tanks, candles, candle-sticks, matches match-cases, baskets, lanterns, water-pipes, ladders, step-ladders, rakes, boxes, bird-cages, saddles, tools, hooks, planes, hatchets, table-cloths, napkins, thimbles, spools of thread; of personal things—hats, caps, capes, collars, neckties, shawls, rings, chairs, fans, hair-brushes, pipes; of playthings—kites, fire-crackers, marbles,

		Per ct.
Human	B 10
	A 12	_____
Animal	B 7
	A 14	_____
Story Illustra- tion	B 1	..
	A 7	_____
Thing	B 88
	A 67	_____

Chart III, Showing Character of Representations.

bicycles, sleds, guns, scrap-books, doll-buggies, dolls' handkerchiefs, swings, balls; of things to eat—candy, puddings, tomares, tortillas, bread, pies, mush, cake, doughnuts, cookies, pancakes; of nature objects—sticks, mushrooms, trees, flowers, apples, birds' nests, birds' eggs, rattlesnake holes, smoke; miscellaneous—numbers, letters, fairies, money, own hands.

Of course all the children do not make all these things, but there is a marvelous opportunity for learning through imitation and through hearing others call the names of the objects they have made.

The older children show an increased complexity in their representations. The younger children make simple, single objects generally in their modeling, while the older children make more combinations, although these are very elementary, such as birds in the nest, bear on a hill, monkey climbing a stick, hen sitting on eggs, horse and wagon, with man in the wagon, baby in buggy, man in boat, children holding parasols, boy in bath-tub, etc. The older children, it will be seen from the chart, are most interested, too, in illustrating the stories they have been told. The following stories were illustrated spontaneously: "The Sun and the Wind," "Old Mother Hubbard," "Squirrel Song," "The Crow and the Fox," "Bre'r Rabbit," "The Little Pine Tree," "Clytie," song, "Once I Got into a Boat," "Jack and the Candle-Stick," and a number of stories of the children's own make. Through their representations the children certainly reveal their store of knowledge and the direction of their interests. When we ponder on the freedom and variety shown in the spontaneous activity, we pity the poor, little, starved, straight-laced mortals who are restricted to the paltry pabulum of the dictation exercises. And when we see each happy child working out his own ideas and realizing his own inner self, we pity the class-bound children who are obliged each to do what his neighbor does, and all what the dictation of one pronounces. The simple dictation exercise doubtless has a place, but not the adoration given it by many kindergartens. Only by bringing free activity to the front, and giving it its rightfully large share, can the intuitions of Froebel be realized and the index-finger of modern scientific child-study be heeded.

A few closing words as to the value of the test. To the teacher it is a wonderful revelation of the mental status of each child, what his interests are, what his range of thought is, what he is able to do, how he progresses in power. To every kindergartner, even if she were not interested in mass results, it would be a valuable experiment, acting as a mirror of truth, in which she might see each individual child reflected, in which she might best survey the new children as they enter her class, in which she might measure their development as it is pictured therein. But aside from the service to the kindergartner, the free-choice hour is of great educational value to the children. Though no longer keeping a strict record, the kindergartners of Santa Barbara are enthusiastic about keeping up this hour for its effect on the children. During no other hour of the day is there such close absorption in their play, such deep interest, such concentration, such unconsciousness of the doings of the other children. This is the hour when each child is most thoroughly bent on self-expression, on spontaneous doing, on self-activity.

Now, to sum up the mass results of this study, we may recapitulate the following general conclusions:

1. The younger children divide their interest among some variety of material, but the two materials which especially grow in interest and become strikingly predominant in the second year are clay and the sewing-card, while many of the traditional kindergarten materials—sticks, slats, rings, lentils, tablets, etc.—are practically a dead-weight.

2. The children at first choose chiefly from the attractiveness of the material itself, but later discriminate according to what use can be made of the material.

3. The use the child is most largely interested in is spontaneous representation of living and natural forms, of the objects that he knows, and his interest in design, while capable of some development, is very primitive at this age.

4. The child is capable of most concentrated work when he is engaged in that which interests him individually, when he is free to realize, under proper incentive, his own self-activity—the highest end to be sought, according to Froebel.

CAROLINE FREAR BURK.

The Love of Nature.

Our kindergartens have not done any systematic work in nature lines the past year, not because we have not realized that herein lies the soul and origin of the primal instincts of man, but because conditions for the greater part of the year have been unfavorable. The following papers represent sporadic efforts in two or three of the kindergartens. Since these were written, however, outside gardens have been started in all of the yards, through the generous assistance of the ladies of the Kindergarten Association, and the personal activity of Trustee C. A. Edwards, and, while nothing much can be done in the closing weeks of the present year, nevertheless garden life and interests will doubtless in another year become a feature of the daily occupations of the children. Few cities in America are so providentially favored by climate, wood, hill and ocean as Santa Barbara, and here it is to be hoped a return can be made to Froebel's child-garden, in a literal open-air sense.

I.

I began nature work, not so much for the idea of study, but to foster the children's love for all living creatures. This I have done by means of pets, and through this love observation and investigation have developed spontaneously. Believing that children love best the things dependent upon them for their care, the pets were left for them to feed.

In one corner of the yard, in a roomy wire pen, was kept a pretty white rabbit, which was fed every day by eager hands. A very interesting sight it was, to see a half-dozen little faces pressed up against the wire netting, watching the bunny nibble away on the crisp leaves provided for him. They found out what food he liked best, and were very curious to know why

he wouldn't eat meat like their kitty at home. They noticed that the rabbit hopped instead of ran, and very naturally they examined its little legs and were soon satisfied. Then came the questions as to why it had such long ears, and "wasn't it funny that the bunny could move his ears back and forth?" Not content with watching the rabbit move his ears, they tried to move their own ears. Their interest was shown not only on the playground, but during their free-drawing period and clay-modeling. It was no uncommon sight to see a mamma rabbit with baby rabbits, modeled from their clay, or drawn on the board.

After the bunny met with an untimely end, we next obtained a pair of birds. These were kept in a large cage, four by three by six, so as to give them perfect freedom in using their wings, and in hopping about. The birds depended also on the children for their daily food. Here, again, was shown observation. Birds were cut from paper, birds were drawn on the board and on paper, were modeled from clay, and even outlined with sticks. The bird games and songs took a new meaning to them, and I am sure they felt, when flying around the room, that they flew just as gracefully as did the birds. They had often been shown the difference between the flying of birds and that of butterflies, now with the birds and a live butterfly in the room, they saw for themselves and understood far better. Then the nest-building! One could never conceive of where the different bits of colored string came from, which were showered upon the birds by wee hands. They all felt that they then owned an interest in that nest. Their nest was compared with other nests, and I am sure we were all proud and happy when it was pronounced far to excel any of the others. After the completion of the nest, the children fully expected the eggs, and they were not disappointed. First one little blue egg, then another, and another, and another, until there was a nest of five. With what interest those eggs were watched! The mother bird no sooner left her nest, then up would rush a little investigator to see if the eggs were all there, and what indignant stories were told us, of how some bad boy had robbed a poor little bird's nest, and how "we never would do such a thing!"

After anxious waiting of two weeks, the children were rewarded one morning by seeing one little featherless bird, which was pronounced "a very curious specimen," and "not one bit like a little bird." For a week we hardly got any other result from the free drawing and modeling than birds. There were birds' nests, birds' eggs, little birds, big birds and medium-sized birds. Some were of a very peculiar shape, but the two legs and head were always there, and, to the child, were an excellent resemblance to his birdship.

Besides the birds in the schoolroom, there were three white mice in a very convenient two-story house, made of a large box, with a wire netting over the front and back of it, thus allowing the children to observe them. Then, on the shelf in a large glass globe, dwells a gold fish. There are also transient visitors, consisting of stray dogs or cats, etc. One day a little girl came to school with a turtle tied to the end of a string. This was kept, as a visitor, for two or three days and then turned loose, as the children said, "so it could go home." The white mice are loved very dearly by the children, and often some one's lunch is shared with them. The children love to hold and pet them, and I notice that they get more real comfort from the pets they can fondle.

The fish is one of the best objects for observation. It is easily seen through the globe, while it is at rest and when in motion. It is one of the objects which the children are not satisfied with only watching, but they want to talk about it. They want to know about the "little wings," why it moves its tail back and forth, how it can live under water, and they exclaim, "Why! it keeps its eyes wide open even when it is way down in the water."

After the fish had put in an appearance at school, one little boy came to school one morning with a little fish very carefully wrapped up in a piece of paper. This fish he had obtained from a fish man, and had brought to school for us to study.

By the information the children give us, in regard to the different animals, their interest evidently does not end at 12 o'clock, and many are the questions, no doubt, put to parents or companions during their walks or drives.

ALICE L. BLACKFORD.

II.

Our pretty, sunshiny kindergarten room, being blest with a long shelf placed under a row of windows, is brightened by the presence of a number of plants, mostly ferns. But those most treasured by the children are plants which they have brought from their home gardens, and a small crop of beans and barley, which have known only the kindergarten as a home.

The deepest interest has been shown in the bean plants from the first tiny leaves to the ripening of the bean pods, each child being anxious to be the first to discover a new pod. As soon as the pods ripen one will be laid aside for a future bean crop, and the others will furnish material for a bean party.

Another object lesson in nature's law of growth has proved most interesting to teachers as well as children. Barley was planted in two pieces of cotton placed at the top of two glass jars filled with water. Then one jar was placed in the sunshine and one in the dark, where for a time no difference was noticed. But after a week's vacation great was the children's surprise at the growth of the barley leaves in each jar, for both were of the same height, but one was a healthy green, while the other was almost white. Immediately the children said the white leaves didn't have any sunshine, and one little boy concluded that children needed plenty of sunshine to make them healthy, as well as the plants.

But one morning, when asked if they would like to have their own gardens around the kindergarten building, the brightening of faces and the excited confusion of tongues talking of gardens at home, and what they would plant, told how welcome gardens would be. Consequently gardens were prepared, and the children were soon busy planting seeds and plants. We can not help but feel that as each one plans, plants, sows, and cares for his garden, many a lesson from nature is unconsciously learned, and many a lesson in responsibility and care is gained.

ANNETTE UNDERWOOD.



III.

My children have taken a great many walks, and they are very fond of them. Once, when we went to the beach, the children took off their shoes and stockings and waded in the water, going in just a little way so that the water touched their feet. Then we all sat in an old boat that was on the beach and watched the water come up to us. The tide was high, and there were large breakers, which the children noticed.

Two or three times we have been to a pond that is only a few blocks from the kindergarten. Here, the children like to throw stones into the water, calling to me to see what a big splash they make. The children are anxious for me to see each stone that they throw.

Another time we went to the hills on the other side of the kindergarten. Here the children ran races down the hill, all starting together to see who would get to the bottom first. They, however, did not seem to notice who got there first, but all started up to do it over again. On this same walk we came to a bank by the road, left after grading the street. Here they wanted to stop and jump from the embankment.

We have visited the other kindergartens a number of times, and, although they have enjoyed watching the other children and playing with them, still they were frightened, and nearly always some one has cried.

On the walks the children notice almost every little thing. They see the flowers, and want to gather them for me, although they are in some stranger's yard. The boys especially notice all the old machinery that is lying about, and want to watch any man that is working on the street, especially if he is digging a hole in the ground. The children are also very anxious for me to walk past their houses, and then they run in to call their mothers to see me, and, if there is a baby, they have it brought out for us all to look at it. On their walks they talk all the time, whereas in the house the same ones are peculiarly silent. They point out every thing to me, and if I don't understand the Spanish word, there is always some child who helps us out, while in the kindergarten I often can not get one to tell me what another child has said in Spanish. As they are

so ready to talk when on a walk, it gives me an opportunity to teach them the English word. I think one reason they enjoy the walks is because I am interested in all they see, whereas, if their mothers went with them, they would be in a hurry, or on some errand, and would not take the time to listen to them.

Lately the children have asked to take the dolls with them on the walks. They carry the dolls as carefully as can be all the way. Sometimes the doll is carried between two children, each taking one arm.

FANNIE S. REED.

IV.

It seems to me that of the walks which my class and I have taken, the most successful were those for the purpose of visiting absent children. In this way the Spanish children realize more fully that they are wanted, and that they are missed when they do not attend.

A walk which the children seemed to enjoy, and from which they learned a great deal, was one to the beach. On that occasion we saw guinea fowls, which a great many had never before seen. After we reached the beach we built houses in the sand, and gathered moss and pretty stones. The moss we floated on cards, and some was taken home. The stones we used for number lessons, and also in sand to make walls, fences, mark off drives, and to finish off mountains. At the beach we talked about boats, sang a few boat songs, etc. The children found a dead duck, which was very interesting, and the web feet were examined very closely. Live ducks were seen on the water, and the swimming process observed.

Another walk was to a slough. On the way the children saw tules growing in water, and thought them very peculiar.

They were taught to make willow whistles, as the willow trees were at their prime then. We came to a garden of artichokes, and, as the wind was blowing, the little balloons were flying in every direction. I then told the story of dandelion,

and pointed out nature's provision for distributing seed. We took some of the balloons back to school, and one pupil told those who had remained what they had seen, and showed how the balloons were carried through the air by the wind.

Eucalyptus cones were also gathered. A few days later the cones began to dry. The seed fell out, affording a good lesson in nature's treasure-boxes. Some of the children began then to bring all kinds of treasure-boxes to show. When we reached the slough we found it inhabited by flocks of little birds. Some of the children who brought lunches threw crumbs to them. We were all very quiet, and the birds grew very bold, coming within two or three feet of us to eat. This pleased the children immensely.

EVALINE ROSE SEXTON.

Counting and Number.

The tendency in children to count finds its origin, probably, in musical rhythm, and has nothing to do with mathematics. As such, counting is a naming of rhythms, and this instinct appears very early in education. The process in the early stages has nothing to do with the counting of objects. Children as a rule readily learn to count to twenty or more long before they can tell how many fingers they have. Nevertheless, the counting of objects possesses an early interest for children, but we must clearly distinguish this interest from any conception of number relations. Abstract number relations certainly do not appeal to the child until a late period—far later than the period when the subject is usually forced into the schools, and in introducing counting in rhythms and counting of objects into the kindergarten, we must ask that no confusion be made between this class of work and that which is entered upon in the school. Children possess a ready and responsive interest for the former, and for arranging objects in numbered groups. This class of work, in which the object is always present, forms a natural and useful preparation for the demands of the school. If the same kind of number work were continued in the school for two or three years, before abstract relations were touched, our pupils would doubtless make better progress in arithmetic.

PRACTICAL METHODS.

When the kindergartens opened in August I had a class with twenty-five pupils on the roll, and an average daily attendance

of twenty. All were of foreign parentage, mostly Spanish and Italian, with some French and Chinese. A small number could understand and speak a few words of English, but their knowledge was so slight it was of little help. I began to teach number with language. First I procured a large box, and filled it with articles of every description that could be used in number work—balls, scissors, dolls, blocks, sticks, bells, buttons, etc. I would have the children name these articles, as “one bell,” “two balls,” “three dolls,” etc. At odd moments I would step to the board and draw some one of the above-named articles, and have the children tell how many there were. In this way they soon learned enough English to have quite a variety of words in their number work.

THE FIRST GIFT BALLS. I would hold up different groups of balls of the same color, asking individual children to tell how many they saw, and the color. Or I would hold up the same group in different colors, asking the same questions. In this way simple addition was introduced, as, “two red balls and one yellow ball make three balls,” etc. After a lesson of this kind for a few minutes we would have free play. I sometimes go to the children separately, blindfold their eyes, and have them feel different groups and tell me how many balls there are. If they cannot tell, I let them open their eyes and count. As another variety I sometimes bounce the ball, and call on some child to count aloud the number of times the ball strikes. Later all count to themselves. I never allow the pupils to answer in concert, for by experience I soon learned that one or two were doing all the answering, and the others were simply guessing or saying nothing at all.

SECOND GIFT BEADS. With these I always give one form of two colors, as red and yellow, violet and orange; or, two forms of the same color, as cubes and balls, or cubes and cylinders; otherwise it is confusing to the child. With two colors, I first have the children string the beads one and one; then two and two; three and three, etc.; or, again, one and two; one and three, etc. After a lesson of this kind we paste parquetry on a card to take home, using the same number of discs as the groups they strung. Thus this number is emphasized as far as possible.

NUMBER CARDS. These are made by taking pieces of card-board, about six by eight inches, and pasting parquetry on them in certain small groups. I have made several cards of this kind, with groups of two, three, four, five, etc., each group in the same color. The children may help make these by taking the desired number to arrange and paste on the card. I hold up a card before them and say: "John, draw on the board the number of balls you see," "Nellie, get me the same number of balls out of the box," "Marie, hold up as many fingers," "Pedro, tell me how many," "Louis, what color are they?" At other times several are sent to the board, each being shown a different card, and are asked to put the same number of circles upon the board. Similarly they make balls in the sand-box. Then, again, they are given paper, marked off in squares, and they copy the cards in the squares as fast as they are shown to them. Or, they are given tablets of the same size as the parquetry, and they make new cards. This work is very exciting, and the children enjoy it; however, we never have it longer than ten or fifteen minutes at a time. Sometimes several children are asked how many circles or squares they see on the same card. Very often the answer is incorrect. I then show the card again, and we count aloud, and they soon learn not to guess.

The third, fourth, fifth, and sixth gifts are about the best material in the kindergarten with which to teach number individually, and, as a great deal of my work must be individual, I have perhaps used these more than any other. Sometimes the four gifts are combined, arranged in groups as dictated, twos, threes, fours, etc. Then I go around with a basket and tell each child to put in so many, calling for a new number from each pupil. Next, I ask each to take out a stated number. As another variety of method, I go to each child, and have him group and count, close his eyes and feel groups, and tell how many. Or I hold up the groups and have him answer at a glance, etc.

STICKS. I think these might be put to excellent use in some kindergartens, but with the Spanish children I have had no success. The sticks break too easily, and the children love to break them.

Moral Education.

Morals, in the kindergarten, have to do, not with those abstract spiritualities—goodness, wickedness, cruelty, justice, honesty—but with concrete instances. The child can not have adequate conception of such products, except by experience and comparison. The kindergarten has to do with concrete physical actions in a strictly concrete sense. We name for the child, as occasion brings them concretely before him, this act as bad, that act as good; this act as cruel, that as merciful; this act as generous, that as mean; this as unjust, that as just. And these are the child's first lessons in the theory of morality. At first, all actions have practically no moral quality for him. We name them for him, and affix our approbation or disapprobation so that he may later recognize them. This process must be accomplished before the child can have an apprehensive basis for such abstractions as goodness in general, cruelty in general, justice in general, generosity in general, etc. The period for the pedagogic treatment of these abstractions is the adolescent period. The kindergarten problem of morals is more of a physical one, having to deal with concrete actions, cropping out largely in children's social plays and games. The fundamental error of the orthodox kindergarten, as has already been repeatedly illustrated, is its attempt to forestall the period of natural ripening by forcing immaturity the development of conceptions which belong to the later periods, and by neglecting to cultivate instincts which legitimately belong to the kindergarten ages. Moral education passes through stages. Two phases appear in the kindergarten period: First, that of infancy and early childhood, when the child sees no distinction between "what is right" and "what I want." The second stage begins when, confused by the fact that he fails to establish the identity of the two, he falls back

and accepts an authority to determine the right and the wrong. Right then becomes "what mamma permits," and wrong is "what mamma forbids." The child enters the kindergarten at the beginning of the second phase, and the social life into which he is thrust serves as an admirable school of experience. His "want" is in continual conflict with others' "wants." It is the old struggle of the race, by which our modern ethical principles have been evolved. The child must retrace the path at least hastily. His intercourse should be as free as possible, for these experiences, though some may be hard knocks, constitute the elements out of which moral abstractions are made. As these moral experiences occur, he learns in a practical way their names. He learns that this particular act is a dishonest one, this a cowardly one, that a brave one, etc. But by the middle of the kindergarten period he generally has learned that this moral problem is a perplexing one, and readily enough accepts the fact that his mother, or his kindergartner, seems somehow to have figured out the matter. He at least recognizes their authority, and takes it as a matter of course that right is what they permit, and wrong that which they forbid. Studies abundantly establish the point that children, until ten or twelve, unquestionably accept this simple philosophy of the whole matter. From this standpoint, there is no place for the attempts we so often observe to induce the child to see logical reasons for justice, or to appeal to a suppositious sense of right and wrong. He has as yet no such abstract sense. He is in no mood to bother with these abstractions; he is now merely taking in a stock of samples of the acts which the world calls bad or good.

Further, at this epoch there is no reason, either in theory or in practice, which forbids the establishment of a prompt and unquestioning obedience. There is no need to give reasons for obedience, for the child instinctively feels none. His philosophy is yet altogether too simple. The time, it is true, will come in later life, when he has taken in his stock of concrete cases, that he will fall to comparing them one with another. Then the parent, as the moral autocrat, is dethroned, and a sense of right, as an abstraction from his many concrete cases, enters upon him. But with this period the kinder-

gartner has nothing to do. While it is not necessary to thrust the child into a bad environment—discretionary judgment is always essential—still, it is necessary for the child to meet and grapple with wrongs as well as rights, not as a philosopher, but as a quicksilver globule gathering up the golden grains of moral experience. The parent, or the kindergartner, must be ever by him, to tell him what is wrong and what is right, briefly and to the point, and to see that he *always* does the right thing, and does it promptly, to the end that the right thing may be imbedded as a habit in his spinal cord. The philosophy, or the *grammar*, of morals belongs to a later stage of development, as all kinds of grammar properly do, and the grammar of morals is as much out of place in the kindergarten as the grammar of language. The child must learn to act correctly, and to speak correctly, before he takes up the whys and wherefores.

All social plays introduce moral education, but it would seem that some plays would be more suitable for this purpose than others. The field to which natural play here opens the door for the intelligent kindergartner is an immense one, and as yet has scarcely been entered. It seems strange that doll play, for example, has never been utilized by the kindergarten as moral material. The study on doll play, by President G. Stanley Hall and Dr. Ellis, shows that it is practically a universal instinct, whose nascency begins in the kindergarten period, and that in playing with dolls children execute more altruistic acts than in any other play. The altruism may be merely mimic, and be without much thought or feeling, but this is the natural starting point. Children set a moral example to their dolls, learn information that they may impart it to their dolls, act the autocrat in telling the dolls what is right and what is wrong, mete out punishment, sympathize, forgive, suffer privation for the doll's sake, and do other acts of equal moral import. Why should not the curriculum contain a lesson on morals through doll play?

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FREDERIC BURK.

Kindergartners' Diaries.

Each kindergartner has kept for the greater part of the year a diary of her methods for reference in the weekly reports to the supervisor. The diaries furnish a birds-eye glimpse of the children's life in the kindergarten. A few extracts, within the limits of possible space, are here inserted. It should be explained that the writers of the extracts given had no notion, at the time of writing, of their publication.

I.

MONDAY, FEBRUARY 27, 1899 : After my class came into my room, the first period we had the story and the illustration. Each morning, before I tell my story, I ask the children if they have a story to tell me. About a half a dozen of the children had seen the bear that is around, and they had a great deal to tell about the wonderful things that he did. After each one had had a chance to talk, I told them a fable, "The Ant and the Dove," which they liked very much. I had them illustrate with pencil this morning, although they usually go to the board. Sometimes I use the brush and water colors, but many of the children choose pencil in preference. I notice that they do not go into detail so much with the brush as with the pencil.

The development in drawing is very interesting to watch; one new little girl, who for the first few days would not draw because she couldn't, now seems to enjoy it as much as the others. I try to go to each child and have them tell me the story his pictures tell, and, with few exceptions, the children talk readily and enjoy telling the story from the pictures.

After recess I have a number lesson, and this morning used beads and uncolored tablets. I had each child select the one

color in beads that he preferred, then had a lesson in grouping, using the beads and square tablets. All the children can count ten objects, and at least half, if not more, can count to forty, for each morning we have some child count the beads, and we usually have between forty and fifty present. In grouping I do not go above ten; many of the children can make groups to ten (some of the newer ones have not gotten beyond six). After about a twenty-minute number lesson I passed the scrap books and single pictures, which they always enjoy, and find a great deal to talk about. On finding a picture of Santa Claus, Anita, a very musical child, began to sing "Jolly Old St. Nicholas." Lorena found a picture of some bells, and sat there, singing, "Ring, Ring, Xmas Bells." Margery found a picture of a fox and a goose, and held it up and said it was the picture of a story I once told them. The ridiculous pictures appeal to Winfield, and he will sit and laugh all to himself at a comical picture of cats dressed up, or Brownies in their comical costumes and attitudes.

After recess we usually sing a little while. I let the children select the songs, and find that "Jolly Old St. Nicholas" and "Once I Got into a Boat" are called for every day. I find they are specially fond of the songs that have motion or action in them. We sing one about the barnyard, where the different animals are represented, which they are very fond of. After singing, they had free play with the blocks, of which they do not seem to tire. By the blocks, I refer to the third, fourth and fifth gifts, which we have taken out of the boxes and put all together. With the blocks I gave each one a second gift cube, or cylinder, and it was interesting to watch the different ways in which these were used. Several used the large cube for the main part of a house or church, and then built towers, etc., on top and around, and made some wonderful buildings. The symmetry of the buildings is quite remarkable, I think. Several of the boys made trains, and left the large cube on the back of the table untouched. All the children build, and really enjoy it. One little girl did not build for the first few days, but just sat and watched the others. I let her alone, and wondered what she would do later. Now she never leaves her material untouched, but enjoys it quite as

much as the others; however, I have observed that she has not much originality. No doubt this is a case of imitation.

TUESDAY, FEBRUARY 28: This morning I told the story of "The Ugly Duckling," which the children enjoyed very much. I never had a class where all seemed to enjoy a story as they do in this class. After the story this morning, Daisy said, "Oh, tell us another." Just after telling the story Mrs. Rice came in to sing with the children, so I did not have time to let them illustrate it, but later we had clay, and they made the story in clay.

After recess, in the number lesson, I used sticks, and we had a game for a change. I had each child place ten sticks in a row on the back of the table, then asked them to listen and do as the story, which I was to tell, said. I then repeated from "Mother Goose" the rhyme about "Ten little boys standing in a line, One went home, then there were nine," etc., each time the children taking one stick away. After taking away the stick I had them count and find out for themselves how many were left. Then, starting with one, we went to ten again. The children were delighted, and felt it was only a game, but I considered it quite an instructive little lesson. The books and pictures were then passed for a few minutes, and the children found pictures of ducks and swans, and spoke of them being like the story I told in the morning.

After recess we had clay, which they always enjoy. Many times I do not suggest, but to-day I suggested making the story, and some made remarkable ducks and swans. Carol, a new little boy, but quite an exceptional child in drawing and modeling, made the mother duck and the babies and the swan, all very good representations. He made one duck where it was walking and where the feet showed, and one where it was swimming, with its wings slightly spread. I find that twenty minutes are long enough with the clay, for during that time the children enjoy and make something, but, longer than that, some of the children use it in an aimless sort of way. I always try to take it away just before they tire of it.

WEDNESDAY, MARCH 1: Asking the children for a story this morning, I found that two had stories, which they told very nicely to the rest of the children. Instead of telling a

story myself, I gave each child a pencil and paper, and asked him to draw some story that he had heard me tell, and I went around to each one and tried to guess what the story was. This was a specially interesting experiment, and in all but about three cases I guessed the story immediately.

In the number lesson we used acorns, shells and chilicotes, all of which the children have collected from time to time. I put some in each basket, had them passed, then asked the children to place them in a row and whisper to me as I came around how many they had. All but four counted correctly. I then asked them to place the objects in twos and threes, alternating, then threes and fours. After the number lesson they looked at pictures for a few minutes, and then we had a little color lesson in the form of a game. I chose six colors of the first gift balls and placed them on a table. One child at a time would close his eyes; I would take away one ball, and on opening his eyes the child would guess what color was gone. I do not have a color lesson every day, for these older children are very familiar with the colors. (I have discovered that one little boy in the class is color blind.)

After recess I had all the materials in the kindergarten placed on a table, and we played store. Each child was given a round tablet for a piece of money, and in turn came to me and bought the material preferred, and used it without suggestion from me. Three chose dolls, one boy and two girls; three boys chose first gift balls; three chose brushes and paint; four chose colored pencils; four chose beads and strings; four chose blocks. The two girls who chose dolls rocked them and played with them, but the boy tired of his very quickly. The other children used the material they had bought and enjoyed it. After the materials were put away there were a few minutes left, and I asked the children to look all around and then choose the picture in our room they thought was the prettiest. I went to each one individually and had him whisper the choice. Six chose "Birth of the American Flag," four chose the "Yard of Roses"; four, the "Violets"; two, the "Kittens"; one, the "Snow Scene"; one, the "Autumn Scene"; one, the picture of a little girl, and one, the picture of a group of children at a picnic.

THURSDAY, MARCH 2: For the first period I exchanged classes with Miss Harrison and told her class the fable about "The Lion and the Mouse." They enjoyed it very much, and retold it to her very nicely.

After recess, for the number lesson I used second gift beads. I gave each child a basket with the colored beads, and asked him to select the two colors he liked best and place them in another basket. After the beads were assorted I asked the children to make sevens for me, making one seven of one color and the next of the other color. Some of the new children did not know seven, so I asked them to make smaller groups. After placing the beads in groups on the table they asked for a string, and each child strung the beads in the same way in which they were placed on the table. I am inclined to think that for some of my children the assorting of color with the beads and grouping are too much for one lesson, so usually I assort the beads myself and give just the two colors to each child.

After recess we had some singing, which the children always enjoy, and then the picture books were passed. The animal picture book is a great favorite with the boys, and one or two ask specially for it each day. In looking at the books I find they go more slowly than at first, and really seem to study the pictures. While looking at the pictures they talk a great deal about them, call each other's attention to certain pictures, and are always calling me to see something they have found. Often I make up a story about some picture to which they call my attention, and they listen very eagerly to anything in the form of a story. After the books were put away, I had paper and scissors passed for free-hand cutting, and asked each one to cut something he or she had seen in the picture books. I did not feel that there was much originality displayed in the cutting to-day. Several cut things which they called tigers, lions, etc., which they had seen in the pictures, but there was very little likeness to the animal. Anita cut a wonderful Mission, cutting the arches, cross, etc. She seems to have a special fondness for the Mission, for she has cut it before.

FRIDAY, MARCH 3: This morning I asked for a story, and

Olive told a comical one about a little boy and his dream concerning a mosquito. This is the first time this little girl has ever volunteered to tell anything in the form of a story, and she has been in the class since the first of the year. In our room is a very pretty picture of "Little Bo-Peep," and we have a toy lamb in the kindergarten, so, referring to these two, I repeated the "Mother Goose" rhyme of "Little Bo-Peep." They all knew the first part, but the last part, where the sheep come home without their tails, and where little Bo-Peep finds them all hung on a tree, was new to them, and they laughed and enjoyed it very much. I did not say anything about the number of sheep, but asked some of the children how many they thought she had. Some said two, others three and four, and one child seemed quite positive that she only had one. Their drawings were very amusing. They drew Bo-Peep with her crook, drew the sheep with tails, then without, and then made the tree with the tails hanging upon it.

In the number lesson we used sticks. I gave each child a basket with uncolored sticks, together with the color he asked for. I had assorted the sticks, and asked each one to tell me the color he preferred. I find they always have a preference in color, and I like to let them make their own choice. I had them group them in this way—one uncolored, two colored, three uncolored, four colored, five uncolored. I did not make anything of *color*, never do in a number lesson, but like to use the contrast in grouping, for the groups are more distinctive where two colors are used.

After the number lesson the books were passed for about five minutes. Nearly every day some child brings a book from home, and the rest of the children always enjoy looking at the new books. They do not seem to tire of the same picture books, for they receive them just as eagerly as ever. Our collection of bird pictures some one always asks for. I am convinced that the colored pictures always appeal to the children. To-day I gave several a new book, with colored and uncolored pictures, and every time they came to a colored picture they called me over to see it; the uncolored ones evidently did not impress them. After recess we played store again, and the children had free choice and free use of materials.

To-day the beads, blocks, dolls, first gift and rings were chosen. Seven children made the same choice to-day as before. I have only tried this experiment twice, but it is very interesting, and the children enjoy it immensely.

Two children chose the dolls, a boy and a girl. Four chose the first gift balls. They rolled them, bounced them on the table and threw them up and caught them. I do not think the first gift will be chosen much, for there is so little that a child can do with it at the table. Two chose rings; they played with them, but did not seem to do anything special with them. With the rings only conventional figures can be made, and I am positive these do not appeal to children, for I have observed that they rarely make them of their own accord. Mabel found she could spin a ring, so for a time seemed to enjoy that. Six chose blocks; three of these had made the same choice before. They always put the blocks to good use, and never seem to tire of building. I find, too, that they like the odd shapes, triangles, oblongs, etc., and Winfield in buying to-day said, "Don't give me too many cubes, I like the other kinds." Five chose second gift beads and strings. They always ask for a string with beads, and to-day two strung them in regard to color or number, but the others put them on regardless of either; the aim seemed to be to fill the string. The two who chose the tile boards filled them with pegs (regardless of color), and Carol held his up and played he was reading a newspaper, much to the amusement of those about him. After the materials were put away there was a little time left, so we sang some of the favorite songs.

My observations during this period of free choice and free use of materials have been very interesting and very instructive, for I feel that in this way we find out what the children's interests really are, and can better direct them.

GERTRUDE M. DIEHL.

II.

MONDAY: The morning being pleasant, we had our march-

ing and singing out doors. One child was chosen captain, the others following where he led. There was single file marching, double file marching, straight line marching, curved line marching, slow marching, fast marching, and every other kind of marching that could be thought of by one little brain. After the marching came free-choice singing, the children volunteering their favorite songs.

At 9:30 they all marched into the school room, and at the signal from the piano took their seats and sat waiting for the usual morning story. This morning the story was of "The Wolf and the Crane." As the children had seen the pictures of both a wolf and a crane among their collection of colored pictures, they thought that those were surely the originals of the story. After the telling of the story, the children were asked to illustrate it on paper. After the illustrations they were given five minutes for free drawing at the board.

From 10:05 to 10:25 recess was given. As usual, the football took a prominent place in the games, as did also sand-building, swinging, and jumping.

From 10:25 to 11:30 was occupied in marching to the seats and resting, the piano being played very softly, while all the little heads rested on the tables.

From 10:30 to 10:50 was devoted to color work, the children placing on a string first all beads of one color; next, beads of another color, and so on until all six colors were used. This they all did very readily, with the exception of one little boy, who is apparently color-blind.

From 10:50 to 10:55 the children were allowed to look at a collection of scrap books which had been given them and to converse freely about them.

11:05 to 11:25, recess.

11:25 to 11:30, marching to seats and resting.

11:30 to 11:50, free play with any of the kindergarten material which each individual chose.

11:50 to 12, they put away the material and sang the closing song.

TUESDAY: The school opened with free marchings, after which the children sang chosen songs.

At 9:30 the children took their seats, when the story of

"The Dog and the Bone" was told them. Then they illustrated the story on paper and told it. Before the hour closed five minutes were devoted to circle drawing on the board, using the free-arm movement.

10:05 to 10:25, recess.

The day was foggy, so the greater number of the little girls stayed inside and played house, while the majority of the little boys and girls on the ground enjoyed climbing upon the fence and jumping down into the sand. A few of the boys played football, and two little girls played with the swings.

10:25 to 10:30, they marched to seats and rested. (This rest period seems very beneficial, as with very little exception the children seem to enter into the spirit of it.)

10:30 to 10:50, number lesson. I gave them a piece of clay, then, drawing three circles on the board, told them to make that number of marbles. After the lesson they were permitted to make anything they wished from the clay.

10:50 to 11:05, a collection of bird pictures was looked at and talked about. The pictures had been put away for several days, consequently were enjoyed more than usual.

11:05 to 11:25, recess. Again the fence climbing and jumping were indulged in to a great extent.

11:25 to 11:30, marching and rest.

11:30 to 11:50, free play.

It is quite noticeable that in the advanced class sewing is the choice, while, in the small class, clay and beads are selected.

ALICE L. BLACKFORD.

III.

We opened with the songs, "Father, We Thank Thee," "Anvil Chorus," "Sleep, Baby, Sleep." These three were suggested by myself, but others were called for, and several that time would not permit were postponed until later in the morning, as follows, "Pickaninny," "Old Black Joe," "Once I Got into a Boat," "Over the River." For the benefit of monotones I gave a few moments drill on tones representing a car whistle,

